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ORIGINAL ARTICLES.

INFLUENCE OF DIET ON HEALTH.*

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THE first duty of the physician to the public being the prevention of disease, there can be no more important subject for our consideration in this connection than the influence of diet upon health, and none can more fully appreciate this factor than the physician who is constantly studying the causes of disease and their probable prevention.

It is unanimously admitted that the great majority of non-contagious diseases are due to malnutrition, and this largely occasioned, primarily, by errors in diet, which would be preventable through a knowledge of the relative values of foods as nutrients, and of their requirements for digestion.

The question which I desire to bring before this honorable body for discussion at the present juncture is, *How shall the public be instructed as to "the influence of diet on health?"*

We may answer this query in several ways, and perhaps no single method may be sufficient for the purpose, but the combination of all may accomplish considerable.

The *first* method should be commenced in the home, at the very cradle, but this has many drawbacks, chiefly among which is ignorance on the part of parents, and here, under existing circumstances, the office of the physician comes into view, and leads us to

The *second* plan, which will be entirely dependent upon the physician, and involves time and patience, as well as knowledge on his part. Much can be accomplished on the part of the physician, as we know from personal experience, but neither of these methods would speedily bring that benefit to the great public to which we aim; and thus we are introduced to the *third* and more important suggestion, viz., That the subject be made a special study in our educational institutions—even to the kindergarten—graded to suit the age

of the pupil, and so complete that when a scholar graduates from school, nitrogen will be known from carbon, their relations to each other will be understood, their offices in the human organism will be appreciated, and their association as foods be as thoroughly familiar as the language which they have been taught to speak.

The young and impressible mind is ever ready to grasp an idea strikingly presented and forcibly illustrated, especially when it is shown to have a bearing upon health and happiness. Well do we remember an instance in which a man admirably adapted to such work spoke words to a class of children which never will be forgotten, and they dealt only with the most common habits and duties of every-day life in a most simple manner to be understood by all.

We are well aware that there are some difficulties in the way of our proposition, but they seem to us surmountable, and should the subject meet with sufficient favor at your hands, for you to appoint a committee to consider it, we have reason to think that a practical solution would be reached. Doubtless in the beginning, the subject could be interwoven with the text of existing school-books, and in the higher departments, where physiology and hygiene are taught, even to a most limited extent, additions could be made to these text-books and the subject made as interesting and compulsory for graduation as other less important branches.

We are quite aware of the indifference, ignorance and carelessness which prevails even in the medical profession, as to the "influence of diet on health," not alone as regards their own individual conditions, but also as to that of their patients; and is it to be wondered at that the great public, which is not supposed to know much of the "influence of diet on health," should remain in its ignorance, particularly when the medical adviser ignores the subject entirely, as one with which he has nothing to do?

Medical colleges, of course, are expected to provide education upon so vital a subject, and graduates should be required to undergo thorough examination in it. We regret to be compelled to admit that hygiene holds a most insignificant position in the curriculum of many medical colleges, and if students are examined at all, it is in

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the most superficial manner, thereby impressing them with the idea of insignificance.

This could be remedied, in a degree at least, if the colleges themselves could only be made to feel their position regarding it, and it is such bodies as the one which I have the honor now to address which can have the most influence in bringing about this desideratum. The "practice of medicine," as it is termed, or as we prefer to put it, the *office of the physician*, certainly demands something more than the mere prescribing of drugs. The physician should be capable of advising his confiding patients respecting all matters bearing upon physical conditions as well as many which may be termed mental in their nature; but few are competent, by education or otherwise, to attempt it. We think that a system of training, in the ordinary affairs of life, is greatly to be desired, and that our institutions of learning could organize a department which would be practical and useful, by teaching people how to live, and the course should be insisted upon at least with those who would take the profession of medicine. Then might we expect the public to entertain a higher appreciation of the "influence of diet on health" and all allied subjects, and then would the public health begin to feel a subtle influence which would be most pervading, and which would in time work a wonderful change in our mortality tables as well as in the happiness of the people.

Ignorance upon the subject of which we are speaking, tends, as is the case always under such circumstances, to partial views, and hence we have sects in diet—as in other relations in life—such as the vegetarian and other hobbyists. The great tendency of man is to find a hobby and ride it, oftentimes to death, and the sooner this goal is reached perhaps the better. It is to be regretted that educated men sometimes lose balance and urge, for instance, upon all alike, an exclusively nitrogenous diet in health—for example, the "meat diet," or a single meal in twenty-four hours, or eating at too frequent intervals, and a host of other extreme measures, which may be excellent in individual cases of disease, but which may have a most pernicious "influence on health," when adopted by such as are in normal condition.

Physiology teaches us, and experience proves, that a mixed diet is the best calculated to maintain the body in health, and it has been demonstrated that man, under ordinary pressure, requires nutrition in the proportion of two pounds of bread, three-quarters of a pound of meat, and it will be better to add one or two ounces of butter in twenty-four hours.

While too much nitrogenous food leads to an excessive amount of urea and uric acid, it is also a well-known fact that animal life cannot be long preserved on an exclusive diet of fat and starches, as the tissues would soon become worn and wasted, and death from inanition would be the result.

There is a mistaken impression in the public mind as to the sources of sugars and their effects upon the human organism.

The fact that there are different varieties of sugar, and that they differ widely in respect to digestibility, is either unknown, or entirely lost sight of! Sugar—although not entering into the composition of the tissues—appears to play an important part in the production of fat and the development of animal heat, and the fact that *all starch is changed into a low form of sugar*, which is easy of digestion, and upon which *we should depend chiefly* for our carbo-hydrates, should be constantly urged upon the public ear! Cane sugar, which is agreeable to the taste of so many, and is so enticing in its sweetness, behaves as a foreign body in the intestinal canal, until it has been converted into glucose, but this conversion is principally intestinal, the gastric juices producing little effect in this direction.

It is evident that the task of digesting cane-sugar is not an easy one for the organs involved, and we firmly believe that the "influence on health" of cane sugar, is under-estimated, and that the indiscriminate use of it in large quantities, as it so commonly is, is a source of no inconsiderable injury! The substitution of glucose for cane sugar, now, we are told, becoming quite universal for many purposes, is to be regarded, we think, as a benefit rather than otherwise.

It should be generally known that one of the most important agencies in the digestion and assimilation of food, is *water*, and that 75 per cent. of the human body is composed of water, and that four and one-half pounds is daily thrown off by the healthy body, and that a diet largely nitrogenous will tax the system severely, unless a considerable quantity of water be taken for the purpose of getting rid of the waste. It is estimated that a full-grown male adult requires 52 fluid ounces of water daily, and organized structure will not perform its function without its due proportion of this agent. The evils of overpreponderance of fluid in the system should be guarded against in the interest of the solid elements, although the dangers from this source are far less than from too little fluid. It is cruel to neglect to provide children with cold water to drink, at frequent intervals, particularly in hot weather, no matter how they are being fed. If

the thirst is allayed by this natural diluent, the child may refuse food, which is only being taken to relieve the parched mouth, and is not demanded and will not be tolerated as nutrition.

The public must be taught that digestion is a process of solution by hydration, that to convert starch into sugar a molecule of water must be added under the action of a ferment, and that a peptone is produced by a similar process.

It may be truthfully said that the majority care little what they eat, so long as the appetite be satisfied, but they do care to be healthy, and above all that their children should grow up strong.

The multitude will ultimately be attracted by the gain which is to be obtained from good food, rather than the enjoyment which is to be expected in taking it, but they will not appreciate the subject fully until made to *know* that health and strength depend upon diet, that appetite often is subservient to cookery, and that the stomach should not be crowded with pabulum which has reached there through an excessive and unnatural tickling of the palate. Then shall we get rid of excess in condiments, of the dessert, which is an abomination to our age, and people will learn to eat fruit in its natural state without the addition of cane sugar!

We feel that the great majority are underfed, because of the lack of a knowledge of the "influence of diet on health." Some are starving on an excessive quantity of improperly selected foods as to quality, while others are suffering from a mistaken notion as to the needed supply.

It is a pleasure to note the constant advance which is being made in the preparation of foods suited to infants, and it is certainly encouraging dietetically to know that mothers' milk can be imitated so successfully.

It is also an important fact dietetically that predigested foods can be produced, which are both perfect nutrients and quite palatable as well.

These peptones fill an important place in the dietary, even of the healthy, for at times one in health really requires food which shall not tax the powers of digestion, as for instance when one has to undergo severe mental or physical strain, or when one is too tired from any cause to expect digestion to be normally performed. We have used these articles in the place of wine or other alcoholic stimulants, on many occasions, with great satisfaction, and they may be taken at bedtime with great benefit as well as with impunity. We look upon them as excellent promoters of the "temperance cause," as well as of the public health in general!

It has been asserted on eminent authority that the human race is undergoing a great change, a leading manifestation of which is the growing intolerance of alcohol, and we hope it may be true, for wine-bibbing has an important bearing upon health, and in many circles is a part of the diet. We do not underestimate the value of alcohol in its various combinations, both as a medicine and under certain circumstances as a substitute for food, but it should be intelligently prescribed, in accordance with reliable indications, and not be allowed to affect the "influence of diet on health" by reducing the quantity of food required. A person in perfect health, doubtless, needs no alcohol, and consequently this stimulant should not be resorted to as a beverage, but rather should be kept in reserve for emergency, when it will prove equal to the task.

In a state of health, alcohol is liable to interfere with the appetite and with digestion, and it is only in this connection that we propose to consider it for present purposes. The circumstances which have gained for this agent its position in our dietary tables are well known, and belong to the domain of therapeutics.

We have found that the various combinations in which alcohol is found associated require careful study and individualization, and we cannot agree with the inference of some that it is the *water*, and not the alcohol and other ingredients of the admixture, which is alone to be credited with the power of sustaining life, or of giving that impetus which nature requires to enable her to stem the tide of disease and to advance in the direction of recovery.

It is a well-known fact that distilled alcoholic liquors produce influences upon the sensorium and upon the process of digestion, quite at variance with those articles which are the product of fermentation, and this fact should not be lost sight of in our study.

While brandy, whiskey and the like excite beligerency, and irritate the mucous membrane of the stomach at the expense of nutrition, in those who imbibe them too freely, it is equally well known that wines, ales, etc., even when taken in sufficient excess to produce inebriation, excite an entirely different condition of the sensual faculties, as well as having an entirely different effect upon the gastric function.

The poor wretches given up to absinthe-drinking suffer from a peculiar train of nervous symptoms, the most prominent of which is epilepsy of a remarkably severe character. The last moments of the absinthe-drinker are truly horrible.

Absinthe, besides alcohol, contains several ethereal oils, of which the most important is the oil of wormwood. It has been often observed that the use of this beverage results in disorders widely differing from those caused by alcohol alone, and the oil of wormwood has produced in animals tetanic convulsions similar to the epileptiform convulsions which affect absinthe-drinkers.

We regret to say that this habit is taking a strong hold in this country, especially with women, and its influence upon health by decreasing the appetite for good healthful food, is of great importance, and should not be overlooked in the consideration of our subject.

Physiological experiments indicate the necessity for a more careful study of alcohol in its relations to the gastric functions. It has been found that digestion was not only retarded by its introduction into the stomach of a dog, but that the secretion of gastric juice was entirely suspended for a time by its use in strong doses. This condition was probably induced by its physical properties as an irritant-corrosive, rather than by any other influence.

These facts should teach us that the introduction of any toxic agent into the stomachs of our patients, in quantities sufficient to paralyze their natural functions, is entirely out of the question from the standpoint of scientific practice.

Parkes claims that the vegetable salts of the natural light red wines are highly anti-scorbutic, and that the *ethers* excite the pancreas to more active secretion.

Observing that under the immediate influence of alcohol the muscular system is stimulated to unnatural activity, which is followed by the most marked relaxation and debility, we can understand why the results of its long-continued use (even in what are called *moderate* doses) must be a gradually-increasing bodily weakness, general tremors, atrophy of tissue, psychical impairment and finally death from inanition.

The primary effect of all stimulants of this class is a transient increase of working power. But their secondary and lasting influence is in the direction of disability and decay.

Thus, when taken upon an empty stomach, alcohol at first increases the appetite, but if the indulgence be continued, it gives rise to indigestion and entire loss of both desire and relish for food, together with gastric irritation and intense thirst, although, in some cases, not a drop of water can be retained.

Because of the profound influence of alcohol upon the functions of digestion and assimilation, it is incumbent upon us, as physicians, to trace

out its workings in this all-important sphere with especial care, that we may be enabled unerringly to select the cases best fitted for its administration.

The pathological lesions dependent upon a long continued use of alcohol are too well known to require consideration at our hands, for present purposes.

We feel that our subject is too immense and pervading to do it justice in the few short sentences which we have thus aggregated, but the purpose of our essay is only to offer suggestions which may bring out discussion, which I trust will follow, to the end that the "influence of diet on health" may be more fully appreciated, and that the public may be taught to realize that health and all that necessarily follows such a state, must be dependent upon *what* they eat.

REPORT ON THE PROGRESS OF SURGERY.*

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IN making a report of the progress of surgery during the past few months, I find so much of interest and value, that it is impossible, in a single evening, to do justice to even a fractional part of what a complete report would be. I therefore must content myself with a mere mention of many important items, and shall hope in future reports, to discuss subjects that I am now obliged to leave untouched.

THE TREATMENT OF WOUNDS FIRST CLAIMS OUR ATTENTION.

Within a comparatively short period, this department of surgery has undergone radical changes. The majority of surgeons still favor antiseptic methods, though some of the most successful operators of the present day, notably Mr. Lawson Tait, lay very little stress upon the particular antiseptic used. It is, however, to be observed, that these surgeons are scrupulously exacting in the details of their work, and seek by cleanliness, to eliminate every septic germ from the wound. Carbolic acid, while still indispensable in some cases, and for purposes of irrigation, is not as generally used as formerly; and Sir Joseph Lister, a most ardent advocate of phenol for an antiseptic dressing, has seen reasons to change his views, and spoken favorably of the bi-chloride of mercury. It has recently been proposed to combine corrosive sublimate

*Report of the Committee of Surgery of the New York Clinical Club, made March 19th, 1886.

and sal-ammoniac, under the name of *sal-alem-broth*, and substitute its use for that of corrosive sublimate. The antiseptic value of the compound has not been sufficiently tested to fix its position among antiseptics. In the *New York Medical Journal* for October, 1885, Dr. G. R. Fowler published some elaborate experiments with hydranaphthol, which show that this derivative of naphthaline is capable, in the proportion of 1-2000 of water, of holding fermentation in check. Dr. Fowler has successfully performed several operations, using hydranaphthol as an antiseptic.

Moist dressings are falling into disfavor, for it is found that water induces the multiplication of septic organisms. Sublimated cotton; borated cotton, with a previous dusting of salicylic acid; iodoform, boracic acid, and more recently, the sub-nitrite of bismuth, are favorite dressings.

The compound tincture of benzoin is again being quite extensively used to varnish the edges of the wound. Collodion is also much employed to seal wounds, even of large surface, when a drainage tube is inserted.

Rest is insisted upon as essential to the healing process, and cell life is looked upon as the best antiseptic.

A word in relation to iodoform: As a surgical dressing, and an antiseptic, it must always occupy a prominent position; its very disagreeable odor, however, and the unfortunate relation that this bears in the popular mind, to venereal diseases, will prevent it from coming into the general use that its value demands. In the *Journal of Cutaneous and Venereal Diseases* for February, 1886, Dr. C. W. Allen, suggests general

METHODS FOR DISGUIISING THE ODOR OF IODOFORM.

Among the principal agents used for this purpose, are the ethereal oil of sassafras, a few drops; or one part of sulphate of quinine, three parts of charcoal, and one hundred parts of iodoform. Ground coffee, one part to three of iodoform, is also said to be effective for the purpose. It is to be questioned, however, whether the properties of iodoform are not in a measure lost or changed by such admixtures, as is known to be the case with colorless iodine. FOR THE TREATMENT OF CONTUSED WOUNDS, Dr. Arragon suggests the following preparation:

B Valerianæ rad.30 grams.
Aqua.1 litre.

The relief from pain is said to be almost instantaneous after its application.

The days in which chloroform and sulphuric ether were almost exclusively used to produce AN-

ÆSTHESIA FOR SURGICAL OPERATIONS belong to the past. In the Obstetric Clinic at Erlangen, nitrous oxide, mixed with oxygen, the use of which is not attended with the danger of asphyxia that belongs to nitrous oxide, has been extensively used by Klikowitsch, with most gratifying results. In England, the bi-chloride of methylin, or chloromethyl, is used by some surgeons. Sir Spencer Wells employs it exclusively in his abdominal surgery, and asserts that he has never witnessed any ill-effects from its use.

Many cases that formerly required general anæsthesia, are, since the introduction of cocaine, given over to LOCAL ANÆSTHETICS. For minor operations, as the opening of abscesses, the removal of hemorrhoidal tumors, and of other small tumors; operations about the genital organs, the mouth, or any mucous surface, its value is great. Recently, its field of usefulness has been enlarged by Dr. M. J. Roberts, who has used cocaine in several excisions of the hip-joint, with sufficiently satisfactory results to encourage him to repeat the experiment. In one of Dr. Roberts' cases, the anæsthesia was continued for one hour and three-quarters, with three grains of cocaine. Dr. Leonard J. Corning, whose experiments with cocaine have been very thorough, finds that the anæsthesia is more quickly produced, longer maintained, and with less of the drug, by the application of Esmarch's bandage, before making the injection, thus preventing the general absorption of the anæsthetic. But that the use of cocaine is not entirely free from danger cannot be denied. This danger arises chiefly from the liability of a watery solution to become infected with micro-organisms. To avoid this, it has been suggested, to use a saturated solution of boracic acid, containing 1-5000 parts of bi-chloride of mercury, as a medium for the solution of the cocaine. The objection has also been urged, that sloughing of sutures, for which no other cause could be ascertained, has not infrequently been known to follow the local use of cocaine. These it may be isolated data, go to prove that we have not yet learned the limits of the action of this valuable anæsthetic.

Dr. Albert Rosenberg, of Berlin—*Lancet*, July, 1886—reports some operations upon the mucous surfaces, in which he used menthal as a substitute for cocaine. The results show that, while the anæsthesia produced was quite as complete, it was not as lasting as that of cocaine, but that it was more cumulative in action.

THE SUBJECT OF SKIN GRAFTING,

to induce the granulating of large surfaces, has recently received an impetus from the suggestions

of W. Allen, M.D., R. C. Lucas, and C. Puzy, of England. One of the principal drawbacks to the more general adoption of this excellent method of treatment, has hitherto been found in the unwillingness of healthy persons to submit to the necessary mutilation for the benefit of the person operated upon. These gentlemen obtain their grafts from decapitated frogs, and from the prepuce of circumcised children. The latter source will be found available in large hospitals rather than in private practice. The subjects who furnish the grafts being children, with ordinary caution, there is little danger of spreading disease.

While on the subject of ulcers, we will note an interesting cure of PERFORATING ULCER OF THE HAND—similar to the perforating disease of the foot—reported by M. Terillon. The subject was a syphilitic male. When at rest, the ulcer healed, but re-opened when the man resumed work. Locomotor ataxia was present, and a lesion of the spinal cord was suspected.

THE EFFECT OF COLD UPON THE ARREST OF LUPUS, is favorably spoken of by Prof. Gerhardt, of Berlin. The treatment is based upon the belief that the essential factor in the development of lupus is the tubercle bacillus, which is destroyed by the application of extreme cold. Some interesting cases are reported by Dr. C. W. Allen, of the treatment of lupus with pyrogallic acid. The applications seem to arrest the progress of the disease, and induce cicatrization, but no long lasting cures are reported. The majority of European surgeons seem to prefer the curretting operation, using for that purpose, Volkman's sharp spoon.

When the lupus is situated on the face, where a scar is always to be avoided; or TO PREVENT THE UNSIGHTLY SCARS that frequently follow the healing of an ordinary ulceration, Dr. Genese suggests as the result of his own practice, a dressing of perchloride of iron, 3i., collodion, 3ii., applied every day over the seat of the cicatrix.

THE TREATMENT OF ANTHRAX AND CARBUNCLE with ammonia is warmly advocated by Dr. Arendano. Ammonia is here used as an antiseptic, to destroy the bacilli that are believed to cause the disease. The officinal solution is dropped into the incision, and some one of the salts of ammonia administered internally.

The question of THE PROPER SITE OF AMPUTATING FOR SENILE GANGRENE has again been opened by the able discussion of Mr. Jonathan Hutchinson. His experience inclines him to favor the high operation, for he believes that this affords a better chance of recovery than the more conservative practice. Mr. Hutchinson considers that the con-

dition of the blood-vessels in senile gangrene renders the high operation imperative.

In the TREATMENT OF THE DISEASES OF BONE, which for brevity I will make to include fractures, diseases of the joints, and orthopædic surgery, much interesting matter has been recently contributed.

The chief interest in the MANAGEMENT OF FRACTURES centres about the methods that have been employed to maintain the broken bones in apposition, and prevent any degree of motion between the fragments. This question has hitherto been one that related especially to the treatment of fractures of the patella, and ununited fractures, but a record of five cases of compound fracture of the bones of the leg, treated by dressing and wiring the fragments, that was presented to the New York Clinical Society by Dr. J. W. Wright; and a very interesting case reported by Dr. Hubbard, of compound fracture of the tibia, treated after the same method, together with similar cases distributed through recent surgical literature, attest to the value of this procedure, in the treatment of some fractures. The fractured point is thoroughly exposed by incisions, the wound cleansed under antiseptic precautions, and the fragments dressed, and wired, either with silver or copper wire. That this method will add greatly to our success in the treatment of compound fractures, seems to be quite evident. The sources of success are: (a) The wound can be cleansed through the incision. (b) The fracture is at once reduced, and so maintained, without irritation of the soft parts by the ragged edges of bone, thus avoiding, in a great measure, the dangers of suppuration. (c) The pressure of a splint sufficient to hold the unwired fragments in contact is unnecessary, and therefore the circulation is not interfered with. (d) The necessity of frequently changing the dressing is avoided, because of the drainage tube. (e) By this means, limbs that otherwise must be amputated, can be saved. Wire splints, with light, antiseptic dressings, form an important feature in the treatment of these cases.

The treatment of fracture of the patella by wiring the fragments, has recently been made the subject of a statistical review by Dr. F. S. Dennis. The treatment of this accident with metallic sutures has been very encouraging, and is shown to yield better results than any obtained from the older and more usual methods of holding the fragments of bone in contact. That this operation is possible must, in a large measure, be attributed to antiseptic surgery, for whatever we may recognize to be the advantages of removing

the aponeurotic fascia from the fissure caused by the fracture,—an operation that can only be done by exposing the joint quite thoroughly—the disadvantage of opening the knee-joint before antiseptic surgery reduced the danger to a minimum, were sufficient to deter surgeons from doing so, unless under the strong pressure of necessity.

A case of that rare accident, FRACTURE OF THE SACRUM, that was reported in the January *Lancet*, so closely resembles a case that occurred in my own practice, that I trust I may be pardoned for mentioning the latter in this connection.

The master carpenter in one of our large theatres, while working on some machinery, fell a distance of twenty-five feet, striking on his left hip. The manager of the theatre being a patient of mine, I was sent for. I saw the man about twenty minutes after the accident, and found him perfectly conscious, but suffering from shock, and unable to move any part of the body below the hips. The tissues over the left ilium and thigh were not much bruised, though the parts seemed to be flattened. Upon manipulation, this entire half of the pelvic bones seemed to be detached from the opposite side, and to move with distinct crepitus. My diagnosis was fracture at the *sacro* articulation, with probable fracture of the sacrum. The man having no home, was sent to one of our accident hospitals, where he died in about two weeks. An autopsy verified my diagnosis.

An attempt has been made to substitute ERA-SION, OR ARTHRECTOMY, for excision of the knee-joint. Volkman seems to be more successful with the operation than other surgeons; but a comparison between the results obtained by the two methods of treating diseases of the knee-joint, does not speak much in favor of the newer method. The *modus operandi* consists in laying bare the joint, and scraping, or cutting away the pulpy granulation tissue. It is claimed that destruction of bone follows this operation less frequently than has been observed to follow excision. The medullary canal not being opened, possibly osteo-mylitis would be a rare complication.

It is to be feared, that frequently the periosteum is unnecessarily sacrificed in operations upon bone; that in the desire to remove all diseased tissues, the fibrous structure is forcibly removed. With this in view, Dr. Wm. Alexander, of the Liverpool Poor-house Hospital, offers some timely remarks of warning, that have especial reference to excision of the hip-joint. Dr. Alexander insists upon PRESERVING THE PERIOSTEUM, and not stripping it from the bone as practiced by Sayre, and some other surgeons. He maintains that no force should be used in removing the periosteum, and

points out, that the line of separation should be indicated by the point at which difficulty in denuding the bone begins.

Many of the OPERATIONS UPON JOINTS have been materially changed since the introduction of antiseptic surgery. Formerly it was considered a most unfortunate necessity to open a joint, especially one of the large joints, but now the opening of joints is a recognized surgical procedure, even when it is intended to preserve the integrity of the articulating surfaces.

Dr. Robert F. Weir has enriched the literature of this subject by reporting seven cases of chronic serous synovitis of the knee-joint, that he treated successfully with antiseptic irrigation of the joint. The principal consideration is to prevent the entrance of air into the cavity, and with this object in view, the pressure on the surface must be even and firm, and the trocar and canula withdrawn slowly.

Mr. Richard Barwell advocates the use of the aspirator in treating acute inflammation of the knee-joint. After the fluid has been so removed, pressure, by means of adhesive plaster, must be maintained.

In the early stages of acute osteitis, with the hope of arresting the more serious result of osteo-mylitis, the use of the trephine is being advocated by some English surgeons. My own experience would lead me to coincide with this opinion. In several cases, I am confident, that by the timely use of the trephine, I have arrested the process of destruction in the bone, and prevented the development of osteo-mylitis.

One of the most interesting questions belonging to the present SURGERY OF THE GENITO-URINARY ORGANS, is that which is now being agitated in favor of the supra-pubic operation for lithotomy. The objection to the operation has hitherto been, the danger of entering the peritoneal cavity. If this can be avoided—and since the experiments of Dr. J. G. Garson upon the changes in the shape of the peritoneal fold that take place when the rectum is empty, and when it is full, there seems to be no excuse for touching the peritoneum—the ease with which the stone is reached, and the directness of access to the bladder, will commend the operation to surgeons. Sir Henry Thompson has entirely abandoned the perineal section, in favor of the high operation.

The case is different when the question is one of an exploratory incision for the purpose of examining the interior of the bladder, and diagnosing tumors of that organ. For this purpose, American and English surgeons quite generally prefer the perineal section; it affords the best drainage,

and may be supplemented with the sub-pubic incision, when this is necessary to operate upon the bladder. The success of Sir Henry Thompson, and of Mr. Reginald Harrison, in opening the bladder for simple purposes of diagnosis, has done much to place this operation among well recognized surgical procedures.

As showing the possible serious results of a generally considered simple cause, I find a case of FATAL CYSTITIS DUE TO PHYMOSIS, reported in the *Lancet*. The bladder inflammation followed retention of urine, which becoming decomposed, gave rise to the condition that caused death.

Two interesting cases of RECTO-VESICAL FISTULA complicated with stone, both the result of penetrating wounds, were reported before the New York Surgical Society in December. In one case, the only inconvenience that followed the injury was, that the urine passed by the rectum. Two years after the accident, a stone in the bladder gave rise to symptoms that caused the man to seek advice. The removal of the stone through the false opening into the bladder, and sewing up the fistula, resulted in a perfect cure.

The old method of SUB-CUTANEOUS DIVISION OF THE SPHINCTER ANI, FOR FISSURE, and spasmodic neuralgia of anus, has been revived by Mr. Pickering Pick, of St. George's Hospital. With our present antiseptic methods of treating wounds, it is difficult to perceive any advantage that this procedure possesses over the usual operation through the skin, or that which tears the muscular fibres without lacerating the mucous membrane.

The evidence remains conflicting concerning the value of TREATING HEMORRHOIDS WITH INJECTIONS OF CARBOLIC ACID. Dr. Kelsey, of this city, warmly advocates the operation, while other surgeons of equally large experience, as warmly oppose it. The best that can be said of the method is, that it avoids the use of the knife, and where this latter more heroic, but more perfect operation is contra-indicated, it will be of service, but the cures are much more tedious than when the tumors are excised.

Mr. Richard Barwell gives, in the *Lancet*, a resume of 100 cases of VARICOCELE, TREATED WITH THE WIRE LOOP PASSED SUB-CUTANEOUSLY. His results leave nothing to be desired. The silver wire is made to include the vein, and is twisted a little tighter each day, until the vascular canal becomes occluded. Dr. E. E. Keys adopts very much the same procedure, substituting a catgut ligature for the wire of Mr. Barwell. My own experience is in favor of Mr. Barwell's operation.

Considerable interest is at present shown in the

RADICAL CURE FOR HYDROCELE. Volkmann's operation of incising, and suturing the tunica vaginalis to the scrotal skin, with drainage, the entire operation performed under strict antiseptic precautions, finds many adherents. But more recently, Bergmann, of Berlin, proposes to modify Volkmann's method, by extirpating all that portion of the tunica vaginalis that covers the testicle, and dressing the wound with a drainage tube, and dry dressing. Recovery after this operation is said to be complete in about two weeks. It is rather a severe operation, and one that is not likely to be resorted to before others have failed to effect a cure.

One of the simplest, and therefore, the best operation for the radical cure of hydrocele, has been proposed by Mr. A. B. Atherton, of Toronto. It consists in making a small incision into the serous sac, and maintaining drainage by means of a small sized drainage tube. In ten days the sac has so far healed that the tube can no longer be retained, at which time the cure may be considered to be accomplished. Dr. Keys has recently favored the injection of pure carbolic acid, thus following the suggestion of Levis, of Philadelphia. I cannot find that this method possesses any advantage over the use of other irritating or stimulating injections, save that the carbolic acid is an antiseptic; and also, that by causing local anæsthesia, it reduces the suffering to a minimum. In the early days of my practice, I saw such serious results—in one case, sloughing of a large portion of the scrotum, which required a secondary operation for its restoration—from injections of red wine, iodine, etc., that latterly I have trusted to aspiration, or the seton, to effect a cure. My use, in a single case, of the drainage tube, was very satisfactory. Theoretically, the operation seems to me quite scientific; it remains to be proven, whether it will stand the practical test of wider experience.

Mr. Jonathan Hutchinson reported in the *British Medical Journal* for June, 1885, a very interesting case of EXCISION OF BOTH BREASTS AT ONE OPERATION, and justified the procedure upon the ground that a suspended carcinoma occupied the second gland removed. With antiseptic surgery, though the necessary wound is a large one, there seems to be little reason for refusing such an extensive operation under the circumstances named.

One of the principal obstacles to OPERATIONS ABOUT THE MOUTH AND THROAT, where any considerable hemorrhage may be anticipated, is the danger of strangulation from blood flowing into the larynx; and to avoid this complication, we frequently must add to the extent of the principal operation, by performing tracheotomy, and then

plugging the larynx above the insertion of the tube. Some years ago, Mr. Annandale proposed to meet this difficulty, by allowing the head of the patient to hang over the edge of the operating table, thus calling to our aid the law of gravity. In such a position, the blood cannot flow into the larynx, but will pass downwards, and out of the nose. On several occasions I have adopted this method, and been perfectly satisfied with the results. Respiration is carried on without difficulty, and the operator is not embarrassed by being frequently obliged to pause and remove clots from the throat. I am much pleased, therefore, to find that the value of this method has recently been recognized from another quarter. Mr. Mayer Collier, of London, advocates the dependent position of the head, when operating for cleft palate; any one may satisfy himself upon the cadaver, of the mechanical accuracy of this position of the head, during operations about the mouth.

Some interesting experiments have been reported by Dr. Louis S. Pilcher, upon "Arterial ligation as a prophylactic measure after sudden, complete and permanent occlusion of the chief vein." The question at issue is, will the collateral venous circulation be sufficient to return the blood that the unimpaired arteries continue to carry to the tissues, after the principal venous trunks have become occluded? The answer cannot be said to be found, for the number of cases in which both the artery and vein have been ligated, and the number in which only the vein was ligated, have been too small, upon which to establish a decided opinion, but all observers thus far seem to agree, that while the collateral venous circulation does not seem to be sufficient to take the function of the larger trunks when they are suddenly occluded, we must choose between the œdema and pain, that frequently are more or less prolonged after tying the vein only, and occasional gangrene, and the almost certain gangrene that follow ligating both vein and artery. That quite distressing symptoms may follow ligating the principal vein of the arm without subjecting the artery to the same treatment, was illustrated in one of my recent amputations of the breast. The operation was for the removal of a far advanced scirrhus, and, as is my practice, I cleaned out the axilla after Volkmann's method. The axillary glands were much enlarged, and it became necessary to sever the thoracic vein close to the axillary, which, of course, obliged me to ligate the latter vein. Œdema of the hand and forearm developed shortly after the operation, which, together with considerable neuralgic pain has continued. In one of Dr. Pilcher's cases

which closely resembled my own, excepting that the sub-scapular vein was severed, the œdema continued until death, and was the source of increasing discomfort during the prostration that preceded dissolution.

No more fitting place will be found than this, to refer to the relative merits of animal and silk ligatures and sutures. A feeling of distrust of animal ligatures seems to exist among some surgeons. The objection urged, especially when they are used for sutures, is, that they disintegrate too soon, and therefore cannot be relied upon to hold the wound in contact long enough for its edges to unite firmly; and also, the general objection, that animal material may spread infection, if not rendered antiseptic before use. In view of the practice of some of our most widely known practitioners, it seems probable that those surgeons who have been unsuccessful in the use of the animal ligatures, have based their opinion upon insufficient data, or been unfortunate in the selection of the cases in which to use this material. The objection on the score of sepsis is more valid, for it has been found rather difficult to make the animal material perfectly antiseptic. For this purpose it has been suggested to use the new antiseptic, hydranaphthol, as more certain in its action than the hitherto employed carbolic acid, or mercuric bi-chloride. When the quality of disintegration is not required, the braided Chinese silk is more easily used than the animal material, and causes no more irritation. Some surgeons are in the habit of using fine silk ligatures even when the wound is closed, and assert that no evil follows, if the finest available thread is used.

I fear that I have already exceeded the limit of time allowed for the report of the Committee on Surgery, and therefore will reserve for my next report, a consideration of the status of abdominal surgery; perhaps, the most intensely interesting department of modern surgery and the one in which the most brilliant successes are being achieved.

STUDIES OF THE PHYSIOLOGY AND IMPERFECTIONS OF DIGESTION.

BY GEO. H. TAYLOR, M. D., NEW YORK.

THIRD ARTICLE.

IN ill-health, the uses and needs of the organism are presumed to differ from those of health, and are probably more exacting. This fact would render the want of adaptation of digestive secretions to comply with uses for which they were not intended still greater, and the probability of deriving therapeutic advantages from the substi-

tuted digestive agent would be proportionally diminished.

This class of therapeutic difficulties present several distinct phases. It will be sufficient to present the following:

1. In case of sudden transition from one to another form of food of equal nutritive value, considerable disturbance of digestion is often noticed; indeed, expected, even in the best of health. The difficulty disappears after prolonged use of the changed food; it fails to appear, should the transition be gradual instead of sudden.

This experience indicates an adaptive property of the digestive secretions, and therefore, in the organism, from which the secretions are derived. Their quality becomes changed to suit the circumstances imposed upon them. By this spontaneous self-adjustment, the new variety of food becomes converted into nutrient material and absorbed, instead of suffering the morbid changes which are the source of symptoms of faulty digestion. Changes of food therefore imply changes in the properties of the digestive secretions afforded by the organism; they become spontaneously adjusted to the physical uses they are to serve.

It is evident that the defect of adjustment of the secretions from another species of animal to human digestion must be still greater, because the difference in the food is much more extreme than that employed for the same species. This consideration increases the probability of the valuelessness of the usual peptic remedies derived from the usual sources.

2. Conceding that the digestive secretions derived from the lower animal are abundantly competent for the uses of the human species, so far as relates to functions common to both species, there remains a balance of function in the human species, whose support through digestive sources is unprovided for in the digestive act of the lower animal, and, therefore, in the human digestive organs in which the substituted secretions are remedially employed. The physiological specifications may be thus stated:

It may be presumed that heat and the activities by which heat is induced; that muscular power, muscular substance, and the maintenance of these by nutritive processes, are so nearly identical in both the lower animals and in man that they may be maintained from similar food-material entering the organism by essentially the same digestive process, due to essentially the same digestive secretions, and that so far as these forms of energy are concerned, the means used by nature for introducing them through food, may possibly be common to several species of animals.

But human beings habitually manifest a modicum of energy of a form differing from heat and from dynamic power. The energy manifested by the brain, or, at least, those parts of the nervous system which brutes possess only in an inferior degree, if at all, is of this description. The instrument of this form of energy, and the material which furnishes the sub-stratum for its action, necessarily differs in the same proportion as the products differ. Such material sub-stratum not being employed by the brute is not required as an ingredient of brute peptones. Nor is it requisite or even probable that the digestive secretions afforded by the brute will be competent to produce peptones possessing high qualities utterly useless in brute nutrition, since brutes evolve no energies of the kind derived from the predicated sub-stratum. How then, can the digestive secretions of lower animals be of the least service in producing peptones, and providing for the nutritive requirements of human beings, whose needs, especially those connected with the maintenance of certain human energies, are far more exacting than are those of the brute?

For example, it is highly unreasonable to contend that the peptones produced by the digestive secretions of the pig should also contain ingredients, which, though essential to the development of brain power, could only be obstructive to the nutritive processes of the pig, since this animal does not possess functional parts which such ingredients are adapted to serve. It is equally unreasonable to suppose that those functions of the human being, which the lower animal possesses only in inferior degree, can be properly maintained by conditions adapted to only an inferior grade of functions.

6. Even were it perfectly feasible to substitute the digestive secretions of lower animals for those natural to the human digestive organs, and were these sufficiently varied in kind and perfect in quality to comply with the nutritive requirements of human beings, it by no means follows that such a recourse would be remedially useful, or even safe. The supposed quantitative defect for which peptic remedies are administered, so far from being a disadvantage, is quite otherwise. The apparently restricted quantity is in conformity with the diminished needs of the organism for nutritive support; it is an expression of the limit of the physical power of the organism to effect the transformations due in the career of nutritive substance; it indicates restricted dissociation of energy from nutritive substance. It has before been shown that under these circumstances the further introduction of nutritive substance through

the digestive organs is powerless to influence further successive changes of such substances, and that nutritive changes are controlled, not by the rate of introduction, but by the rate of dismissal of matters engaged in nutritive acts, whatever be the form of energy developed.

It is therefore apparent that nutritive material introduced into the organism unbidden by the organ of expenditure, even though the quality of such material be entirely adapted to the human uses and unexceptionable, can have little or no effect in supporting the powers of the vital organism, and must remain in the blood, the tissues, and the other nutritive reservoirs as superfluous, and, at best, inert substance. No substance can be nutritive except when engaged in acts which resolve its constituents into the typical forms for dismissal, and, at the same instant, serve to increase the energies of the organism.

But the presence of an undue amount of inert material, waiting for dissociation of the energies it embodies by vital instruments, to be expressed through vital channels, is fraught with danger; the danger which would be liable to befall those who use peptic aids, if they actually caused the increase of digestion that is claimed for them. For, when the organic circumstances are unfavorable for the development of vital energy from the nutritive material conveyed from the digestive organs into the recesses of the organism, the energy inhering in food is still liable to become dissociated in the chemical form; this form of energy opposes, and cannot support the vital manifestations; and even tends to the destruction of the organs themselves; both general and local forms of disease are expressions of this. Such is the general result of introducing by art nutritive material, unbidden by the expending organs and functions.

The therapeutic use of peptic preparations is a manifest violation of the first principles of physiology, as relates to the automatic self-regulating functions. So far as this therapeutic device is successful, even as palliative, the self-regulating provision is weakened; and to that extent the digestive secretory function is discouraged. It insists that more digestive material should enter the organism than is indicated by the physiological provisions therefor, and thus, under the guise of affording physiological assistance, covertly outrages its elementary principles. It practically denies that there is any relation between the materials introduced and those discharged; between supply and waste; that local and general excess, distension, congestion, obstruction, sub-oxidation, and the long catalogue of consequences arising

from these primary conditions, written in books of pathology, are, so far as relates to therapeutics, causeless.

7. This subject should not be dismissed without reference to its ethical phases, for physiology and therapeutics have their moral as well as physical aspects. To this phase very serious consideration is due, since the material is but another side of, and affords the best illustration of the immaterial universe, furthering its comprehension by rational beings.

If, as has been shown in preceding divisions of the present subject, definite and definable relations subsist between the manifestations of energy by the vital organism and the nutritive activities which sustain these energies, such relations are properly designated "Law." Law implies penalties, and cannot exist in the absence of penalties. The penalties are law in another aspect. The abrogation of the one is destruction of the other.

In this view, faulty digestion is necessarily the outcome of infraction of the proper relation between aliment and its uses for purposes of energy. It is penalty in the digestive sphere, which cannot and ought not to be omitted. There can be no remedy except in the uses to which food is applied as the source of energy. To digest more food, or to compel better digestion in any way disconnected with the acts which dissociate energy, however it may obscure, cannot actually help digestion. The law is no less violated, though the immediate effect may be obscured to the consciousness by the so-called remedy.

Ignorance of the mode of infraction does not protect against the penalty. The pain and the physical disability supervene all the same. The purpose of pain and disability becomes evident as incitives to inquiry as to their causes. To annul pain is to forego its advantages in this respect, and to remain in ignorance of law, whose penalties are being inflicted.

The absence of pain and of restricted power as penalties of transgression of law, would work the speedy ruin of the organism. Disorder and disproportion in the physiological conditions, as respects the supplies of material and the uses to which it is applied, would soon destroy the organic instruments of function. Pain is, therefore, the best thing under the circumstances of its manifestation, and can really be removed only by modification of circumstances. There is in nature no such thing as immunity for the violation of physiological law. What appears so, is after all, only delay of its execution; perhaps, more frequently, a change in the form of penalty.

The influence and tendency of peptic remedies in

general, and of the substitutional digestive agents in particular, are not in the direction of investigation of the causes of their supposed need, but quite the contrary. These remedies, so far as credence is yielded to their claims, practically offer immunity for violation of physiological law, by abolishing the penalty. For faulty digestion is but evidence, and the consequence of such violation. There is improper and impractical relation between the ingesta and its uses. This relation is under the control of the sufferer; he is responsible, and there should be provided in nature some means to apprise him of the fact.

The potential disease consists in the faulty use the organism makes of its nutritive supplies, in consequence of which, a portion is returned in the mass of digestive secretions to the digestive cavity, to produce local morbid phenomena. Peptic remedies, which only seek to remove the local evidence, divert the attention of the sufferer from the potential disease as above defined; these remedies do not extend to the actual malady, only its seeming, its effects; the cause is allowed to continue as before, while futile efforts are being made to destroy the evidences manifested in the digestive organs.

It would therefore appear that the most damaging of the consequences of remedies for indigestion which ignore its causes, consists in the obscuration of the sufferer's perception of right and wrong; the blunting, and even the elimination of the individual sense of responsibility for non-compliance with the requirements of laws written in his organism—the loss of power of discriminating between cure, and the deferring and the changing of the form of penalties; and in his mistaken endeavors to exist as a physical being, under laws susceptible of abrogated penalties.

CLINIQUE.

POSTURAL EVIDENCE.

A NEW DIFFERENTIAL SIGN IN THE DIAGNOSIS OF PSEUDO-CYESIS.

By FRANK A. ROCKWITH, M.D.

MRS. H—, a native of Germany, in her 27th year of age, and the third of her marriage, called me to attend her in confinement.* Her appearance was that of robust

* The record and illustrations of this case were prepared by me for publication while yet attending upon this patient, now twelve years ago. The diagnosis of pregnancy (cyesognosis) being by no means so uninteresting a subject as to justify, in my mind, at least, a neglect of new cases even not difficult of recognition, has induced me to resuscitate these minutes; but more especially, because of the question of the differential diagnosis which not infrequently has led to serious results.

health. She had a fair, almost brilliant, rosy complexion, being a blonde of not unprepossessing appearance. She had believed herself pregnant for fifteen months past, had twice been in false labor, and both times the midwife had used every persuasion to bring about usual results, but the more she "bore down" the less did she progress, until finally, all pains ceasing, she believed herself to have been out of her reckoning. This time she felt, however, that she would certainly "come down."† She had been in the present conditions of seeming labor for well nigh thirty-six hours, but the midwife becoming alarmed at the tardiness of results, advised the calling of a physician.

While making my inquiries I was constantly interrupted by frequent and regularly recurrent pains of a grinding character, commencing in the back and pulling down the thighs, certainly sufficiently natural to be mistaken for true labor pains by most any one, thus, in measure, excusing the errors of the nurse.

My first effort at investigation, external abdominal palpation, showed at once a false state of affairs, the immensely distended abdomen being uniformly enlarged, smooth, rigid and highly tympanitic. Deep pressure was painless, slight touch roused up pseudo-parturient pains. No obstetric tumor could be detected. Digital examination revealed a deep, somewhat cylindrical distended vaginal canal, the examination causing, at the same time, clitoral erethism. Persistent search disclosed finally, an absence of uterus or of other solid bodies, such as tumors or even fecal accumulations. All pains began to subside soon after the true condition was explained. Desiring to ascertain how far a possible areolomammmary sympathy existed in this case, I was surprised to also find no traces of any areolar tissue, nor of any wartlike protuberance giving the faintest idea of a nipple. This visit being at night, a further study of the case was postponed until the next morning, when the following history was obtained: The health of this subject had always been good since her fifth year of age, previous to which, she had a long siege of sickness, beginning as an eruptive fever, but the specific nature of which was unknown to her. She could not remember a period of first menstruation. Her "monthlies" had never been from the genitals, but from the nose or mouth, yet never

Two years previous to this case, I had been the lucky means of saving a life about to undergo an operation of ovariectomy, by persistently requesting at least one month's postponement, my claim being a normal and uncomplicated pregnancy, based too, solely, upon my experience in plastic anatomy, hence, simply by inspection and palpation—the *factus crudilus* of the ancients.

†To "come down"—*nederkommen*, a German phraseology for being confined.

regularly at that, but at intervals of many months. She has never had convulsions, St. Vitus' dance, or other nervous derangements. She has had, however, from her earliest recollection, sexual excitements leading to masturbation. Orgasm was always very persistent during coitus, persisting considerably beyond the act. Her behavior in my presence was chaste, amounting almost to bashfulness; her language was modest and refined.

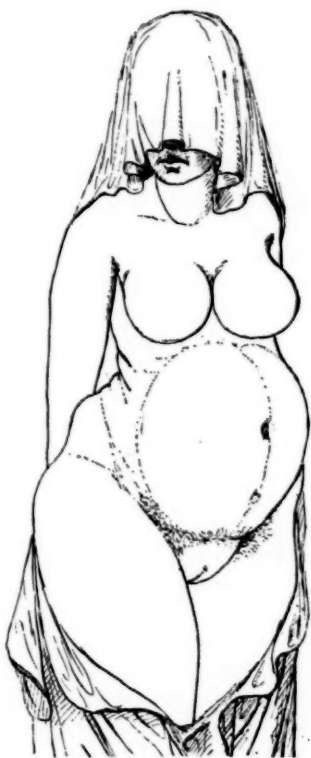


FIGURE No. 1.

A case of pseudo-cyesis. Drawn according to nature with consent of the subject.—Rth.

Her general presentation, from an artistic standpoint of view, offered many points of interest to the student of plastic anatomy. For, although given to polysarcia in the adipose meaning of the word, she was, nevertheless, fairly well proportioned, being of medium height, with intelligence and education above the average.

The brachial diameter was classically *minus* with its coxal confrere. The mammae were perfectly globular, smooth, devoid of their proper areolo-conoidal perfection, but slightly pendulous and elastic. The arms were somewhat slender and soft. The hips, at their coxo-trochan-

teric regions exhibited the unusual anomaly of the gluteal fat-bolsters, so common in certain African tribes, such as the Hottentots, the Bongo-women, as well as occasionally, also, among the Bushmen tribes.

The *mons veneris* was large, due to fat rather than osseous prominence, and almost devoid of pileous covering. The distention of the abdominal muscles still remained permanent when making my second examination—nor was it any time affected by the information of her positive barrenness. The margins of this abdominal distension proved, upon more critical examination, to be well defined, exhibiting a most decided protest from ribs and *processus ensiformis*, thus showing the diaphragm not to be influenced by, nor to be engaged in, this tympanitis. The mesial line was distinct, and umbilicus normally retracted. An examination of the genitals brought to light the following conditions:

Nymphae hypertrophied protruding beyond the *labia majora*; clitoris large; no myrtiform caruncle remained to tell of the previous existence of the hymen. The vaginal canal being influenced by the examination (as on the night before) was spasmodically distended, tubular, and unusually wide at its distal extremity. The largest sized Ferguson's hard rubber speculum entered with ease. After a wearisome search, I discovered finally, upon the posterior distal portion of this *cul de sac*, a fistulous orifice, but so small as not to admit the point of a hard rubber uterine probe. By conjoined recto-vaginal examination, the orifice of this seeming fistula being fixed by a sound, I discovered a small tumor, about as large as a good-sized walnut; it was hard, movable, and somewhat pyriform in shape, no doubt a rudimentary uterus, possibly one, arrested in its development during the eruptive fever sickness of her fifth year.

The case here presented offers us no very remarkable phases of anomaly, except so far, perhaps, as it concerns the persistence of the abdominal enlargement, which being uninfluenced by the fluctuations of the mind, can only be explained in the sense analogous to that of detrusory paralysis of the muscular fibres of the bladder—having here as there, no doubt, its origin in disease of the spinal cord. Only diagnostically has this case verified a principle long before recognized by me as a possible means of differentiation in cases where a justifiable doubt exists, and that only too, in cases of hysterical phantom-pregnancy, of which medical history is not at all deficient. Since in this class of neuroses there exist no augmentation of body weight—nor any other disturbances of the body equilibrium, but only that of size (objectively speaking), we ought to find in the laws established by anthropometry, a means whereby to aid in the differentiation of eyesiognosis.

I refer here to the laws of the centre of gravity of the

human body. Anthropometry is, as a rule, a *terra-incognita* to most medical anatomists. It is, however, the stamping-ground of the plastic artist, and constitutes one of the first elements in his practice.*

The centre of gravity of the human body, when in the erect position, is at the second lumbar vertebra. From thence, the body is balanced according as the weight

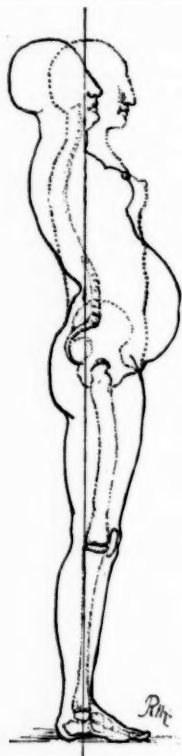


FIG. No. 2.

The perpendicular line refers to dotted figure. It passes in front of atlas bone, intersects the spinal column at the 6th cervical, 9th dorsal, and 3d sacral vertebrae, passing out at the terminal point of the coccyx, in its downward passage through the malleoli.—Rth.

Clear line represents a virginal body.

Dotted line represents pregnancy at term.

may be increased either forward or backward. In the pregnant subject, for instance, the centre of gravity is projected to within the fetal *umbilicus in utero*; the increase of the whole body weight being anterior to the normal centre. To balance this displacement of the true centre of gravity, it becomes necessary that the dorso-cervical portion of the spine be thrown backwards ten to twelve degrees, thus increasing the concavity at the second lumbar aspect, and changing the perpendicular intersection from the ninth dorsal of the normal, to at least, two vertebrae lower, while higher up, instead of the perpendicular touching the anterior aspect of the atlas, it will fall nearly to within the *pomum adam*i of the throat.

This, of course, causes so decided an alteration in the

*One cannot help, while considering this subject, to reflect here upon the almost unexceptionally outrageous infliction of anatomical illustrations which abound so plentifully in our text-books, chief among which stand those treating upon obstetrics and gynecology.

pose of the pregnant woman as to lend to eyesignosis a new means for its differentiation, provided, however, that the false pregnancy be uncomplicated by tumors, dropsy, or other weight-increasing conditions, hence, only in phantom tumors, or as in the case reported above, those entirely the subject of hallucination. In such cases, no matter how great the distension of the abdominal parietes, no alteration of the centre of gravity though will be noticed; hence, this simple physiognomic aspect ought to aid the diagnostician even without reducing the subject to absolute nudity.

To illustrate the point under consideration, I have drawn the accompanying diagram, taking Horner's spinal column as a basis.

HYSTERICAL BREAST.

BY EDWARD P. FOWLER, M. D., NEW YORK.

IN 1865 a lady came to consult me respecting her daughter, a girl of 22 years, who had a tumor in the left breast.

Just above and to the outside of the nipple there was an enlargement, actually about the size of a hen's egg, though apparently much larger. It floated in the breast quite free from any attachment. Upon examining the breast great complaint was made of the exquisite pain produced, no matter how slight the touch; it, indeed, was with some little difficulty and delay that a satisfactory examination was effected. Meantime I had noticed that the garments were worn quite snug-fitting, and I also observed that when examining the axilla a firm pressure upon the tumor with my wrist did not seem to be observed. I found no other glandular swellings about the body.

Menstruation had been quite irregular, sometimes every two weeks, sometimes every two or three months, always pretty free, never painful, but it was always accompanied by increased discomfort in the left breast and a soreness in the right one.

The subject complained of a "never-ending" pain in the regions over the ovaries. Pressure did not stop the pain and somewhat accidentally I found that a very firm, continued pressure afforded, the patient said, an indescribable both pain and pleasure, and to my surprise the patient almost immediately fell into an insensible condition like a most profound sleep. The sleep would last from ten to sixty minutes: it had much the character of that heavy sleep which so often succeeds attacks of epilepsy.

In experimenting I became convinced that although a true sexual orgasm was not induced, still it was certainly kindred in character. For a genuine orgasm it was too prolonged, though

the facial action, the respiration and the bodily movements were exceedingly suggestive. I subsequently discovered that the same result could be obtained by pressure between the upper cervical vertebrae.

The girl at times had been subject to hysterical attacks, but not severe ones, the father and several relatives on his side were epileptic, but they nevertheless exhibited more than ordinary intelligence and ability.

The subject, who was a little above the medium height, and rather slight, had profuse auburn hair, dark, large eyes, almost black eyebrows and lashes, very full lips, and high coloring. She combined more than ordinary intellectuality, with excessive emotion and a natural bent, stimulated by injudicious encouragement, had made of her almost a religious monomaniac, a condition more especially marked since a broken-off love-affair some two years before.

By digital examination I could find nothing wrong with the vagina or womb. The womb was rather undersized, but the difference was not in greater proportion than that common in the hands, feet, nose, or any other part of the body of different persons. The case had already been examined by at least five medical men. Drs. Gray, Willard Parker, Carnochan, Barker, and Peaslee, who unanimously advised extirpation of the tumor.

The social standing of the patient, and the advice which had already been obtained made it somewhat important, as concerned myself, that I should offer no immature counsel. I, therefore, dismissed her with a request that she return in three days. After a pretty diligent consultation of written authorities I came to the same conclusion as had my five predecessors, and was prepared to concur in their advice.

Upon the return however of the mother and daughter I had no opportunity to offer my opinion before the mother expressed a most enthusiastic delight over the unexpected success of my "treatment." For a moment I was rather puzzled as upon the first consultation I had stopped at simply an examination, but I very shortly comprehended that the vaginal examination had been regarded as including "a treatment." The daughter said the tenderness of the breast and lower abdomen had both notably lessened, and the mother was positive that the tumor had decreased in size. I supposed that imagination had a large, if not entire share in the matter, but upon examination, I found that in reality there was a marked decrease in the volume of the tumor. I had not the remotest supposition that my exam-

ination had anything to do with the change, but they both seemed so happy, that I had not the heart, or moral pluck, at the moment to destroy their hopes by advising the course which I felt sure would eventually have to be adopted, and as the tumor was decreasing, I deemed myself justified in waiting. They were very anxious that another "treatment" should be made—if I thought it not too soon. I made another examination, the same as at first, and dismissed them for one week, giving no medicine.

To shorten a long story, my entire care of the case was somewhat over two months, during which time the patient made about weekly visits, sometimes twice a week. The only treatment was the already mentioned vaginal examination. There was a steady reduction of the tumor, and within ten weeks an entire disappearance of it. The pain complained of in the ovarian region was gone and pressure there no longer produced the results before noted.

There was no return of the trouble. Three or four years after the young lady married, and has since given birth to four children and her general health has been good. She nursed all four children.

The next similar case was a married woman of slight build, light auburn or dark red hair, eyebrows darker than hair, dark eyes and rather pale complexion. She was extremely hysterical, as also was her mother, whom she in every way strongly resembled. She came under my professional care in 1858, soon after her marriage, and lived with her husband over eleven years, until his death, but never became enciente. In 1870, at the age of 31, whilst living in Charleston, S. C., a lump began to grow in the left breast, which, in a few months, reached to twice the size of a hen's egg, very hard and very tender, but free from attachments.

In 1871 she came North to consult me, but arriving shortly after I had left to spend the summer in Europe, advice was sought from two or three of the most eminent surgeons in the city. She was counseled to have the breast operated upon without delay. I had been her regular medical attendant for thirteen years, and as the only one in whom she had real faith, besides myself, was Dr. Sims, she started at once for Europe. On her way, in London I think, she saw Dr. Sims, who advised and offered to operate. Declining this, she resumed her journey, and met me at Vevey, Switzerland.

I also expressed the opinion that an operation would possibly be necessary, and directed her to

return to New York, where she could take a preparatory rest until I should arrive two weeks later than she. Upon reaching home I found the tumor had slightly increased, the ovaries were very tender. I do not remember that I ever saw another case where the neck of the womb seemed to be so exquisitely painful on touch, and yet there was no ulceration, no inflammation, no misplacement. The examination, though less than that which seemed to me necessary, so upset and appeared to prostrate the patient, to such a degree, that it made me somewhat uneasy, lest I had done her a harm. Notwithstanding, the next day she seemed suprisingly better, and thought that I must have put to rights something which had been out of place.

To know if there had been any real change, I made a digital examination, but found no change except a marked reduction of tenderness; she said that the touch was still very painful but for all that a certain degree of pressure seemed to give a sense of relief.

I advised a removal of the tumor in the breast, and even went so far as to engage a surgeon to operate. Meantime as the operation was set three weeks ahead, I thought I would see how far the uterine condition could be relieved by manipulation, and especially as I was strongly urged by the patient to do so. Every other day I gave the cervix uteri a firm rubbing for about two or three minutes each time. In less than two weeks the tenderness of the womb had entirely disappeared, excepting a mild degree on the posterior surface, such as is very ordinarily met with. But my greatest surprise came from the fact, that the tumor in the breast had not only become less sensitive, but was palpably diminished.

Acting in obedience to the precepts of conservative surgery and influenced somewhat too by a recollection of the case just related, I advised a postponement of the operation and continued the uterine frictions at three days' intervals. I gave no medicine whatever, excepting, perhaps, now and then some little thing for common cold. In June, 1872, at the end of nine months, I dismissed the patient in better health than she had been for some years, and with not a trace of tumor in the breast, and without the assistance of one grain of medicine.

One day early in 1873 the lady came to me in great alarm from having just discovered that the tumor was again appearing. The matter assumed additional importance from the fact that she had recently become engaged to be again married, and she was in doubt whether it would be right to fulfil the engagement, at all events,

without first giving a full explanation of her condition to her intended husband. The marriage was not to take place under four or five months, and I advised her for the time to say nothing about it, and at once put her under the same treatment as before, though I confess without any too much feeling of encouragement, and I was, therefore, very gratified, when, at the end of three weeks, the tumor had again disappeared. About a month after there were again indications of a recurrence. In reflecting upon the case, I had concluded that marital relations would probably provide all the requisites for a permanent cure, and, as circumstances favored it, I advised that the marriage should take place without delay. The advice was followed, and its correctness was apparently substantiated by the result. The tumor never returned, and to the present time the general health has been unusually good. In 1882, nine years after marriage, the (second) husband died of a South American fever. Two years later the change of life occurred with no trouble. The patient was never enciente.

The third case is, perhaps, more striking than either of the two preceding.

The subject was the daughter of a book-dealer, and came under my care through the interest of some patients of mine, who, in some way, were unnecessarily prejudiced against surgery, and who wished to save the girl, they said, from "butchery." I found my new patient to be a girl of eighteen, rather tall, slight in build, a profusion of dark hair, dark heavy eyebrows and eyelashes, and a complexion inclined to be ruddy. The breasts were both unusually developed, though, perhaps, this appearance was more noticeable from their contrast with the otherwise slight figure.

At birth and during all her life the young lady had been under the professional care of a well-known medical man of this city. She matured at the age of about thirteen, had always been irregular and suffered severely from menstrual colic and violent paroxysms of hysteria.

Four or five months before I was called the patient had directed the attention of her physician to a "lump" in the right breast. He thought the thing very serious in its nature and called two other gentlemen in council. They all agreed that the lump possessed sufficiently the characteristics of scirrhus cancer to call for a surgical removal, and one of them, upon examining the womb found it unnaturally hard and suspected trouble there also. The family became greatly alarmed and the patient entirely demoralized; she went to bed,

refused nourishment and suffered from extreme insomnia and intolerance of either light or sound, and a disposition to reject food as soon as taken. These were the general conditions when I was called to the case.

I found a tumor below the nipple of the right breast, about two inches in diameter, I should judge, in the immediate vicinity of which the milk-ducts on every side were distended and hard. There was not the slightest trace of glandular swelling in axilla, neck, groin, or anywhere in the body excepting the breast.

A vaginal examination discovered a hyperæsthesia of a painful character, but the entire vagina exhibited a most extraordinary power of contractility; it held the finger almost as though grasped by a hand, and at the same time the womb itself became erectile, so that in a few seconds it would change from a natural consistency to a very rigid, almost bone-like condition. This contractile stage lasted for, perhaps, three or four minutes, when, with a muscular relaxation of the entire body, the patient fell into a profound sleep of four hours' duration, during which time it was difficult to even partially arouse her. This phenomenon could always be produced by three or four minutes' firm pressure against the cervix uteri. During these slumbers the respirations would average about fifteen per minute and the pulse about fifty. At other hours the respirations were about thirty-five and pulse generally eighty. Excepting this induced sleep, the mother said that thirty minutes' continuous sleep was an exceedingly rare occasion. The waking from the induced sleep was always accompanied by a great deal of yawning and stretching, and generally with an intense craving for food.

At all other times, and at ALL TIMES BEFORE the commencement of the experiment, there was and had been a very troublesome repugnance and resistance to nourishment, and when taken it would oftener than otherwise be rejected. These results were as unexpected to me as they were gratifying to the family, who supposed them due to some soporific I had applied locally. The first examination gave an experience so different from anything I had ever before encountered, that my attention was very much fixed by it, and influenced somewhat, it may be, by the two cases just described, I at once decided to avoid the use of medicines and see what would ensue from a continuance of the chanced-upon experiment.

Instead of the somewhat monotonous dry record of the case I will give a brief of it, together with the ultimate outcome.

For about two weeks the treatment was made every day, at the end of which time there was a moderate degree of appetite for three meals a day and an average of nine or ten hours of sleep per day, from four to six, of which, after the treatment, would be uninterrupted.

At this point treatment was suspended for one week by menstruation, the first time in nearly three months; entirely painless, and lasting over four days.

After a week I resumed treatment making it every other day. For a week the sleep after treatment was less profound and less restful than it had been before. The vaginal contraction and uterine erectility, which had greatly diminished before the menstruation, had again increased and altogether there seemed a retrograde. Before the menstruation the swelling of the milk-ducts had entirely disappeared; now they again enlarged, though less so than before. In the tumor there had been no apparent change since I first saw it. After about fifteen days of every-other-day treatment, sleep and appetite were re-established, no swelling remained in the milk-ducts, there remained scarcely any tenderness in the tumor, and the disposition had become wonderfully more cheerful.

From this period the girl would aver each time that I saw her, that she frequently felt the tumor move, and the mother said that she had actually, with the hand, felt it do so. I tried to chance upon a movement of the kind, but never succeeded.

I do not know whether this sensation was connected with the process, but from about this time the tumor in the breast began to lessen and with varying rapidity of decrease, it had, at the end of about seven months, entirely disappeared.

The menses had become regular and were painless; there were no more hysterical paroxysms, the breasts were smaller, sleep and appetite natural, and the weight increased from 103 to 127 pounds.

There was no longer any contractile action of the vagina or erection of the uterine neck, and I dismissed the patient as cured.

Some months after this the whole complex of symptoms showed signs of recurring, and, as the young girl had become engaged to be married, I advised its earliest practical consummation. The month which intervened before the marriage I had her under treatment two or three times a week, and the troubles had again all passed away.

Since marriage she has had two living children, one seven months still-born child, but her health has been uniformly good and is so to-day.

In vegetable life and in the lower grades of ani-

mal life it is generally recognized that the generative mechanism and powers are well nigh identical with life itself, compared with which nutrition is quite secondary though next in importance. But in the higher animal organism the inseparable intimacy which exists between the reproductive element and all other vital processes, is apt not to be realized even though theoretically known, because it is so greatly overtopped by all the complex phenomena of the super-added large masses of nerve matter.

The mechanism and functional process of reproduction includes a much larger share of the female organism and life than it does of the male, and her whole being is organized more under its modifying influence, and with her there are many more maladies than with the male that can be distinctly traced to some disturbance in the reproductive tract.

From the three cases recited in this paper together with several other confirmatory though less striking experiences, I am convinced that amongst other maladies connected with the female generative organism there is a class of breast-tumors, formidable in appearance but which may be entirely controlled and dissipated by uterine manipulations, perhaps we might say uterine massage.

From such experience as I have I should say that tumors of this kind are characterized by unusual hardness, freedom from attachments, great sensitiveness, especially upon light touch, absence of all other glandular swellings, hysterical temperament, and with more than an ordinary degree of sexual differentiation.

I think they will generally be found in company with a tenderness in the upper cervical portion of the spine, sensitive ovaries pressure upon which will give a sense of relief even though it increases the pain, and with a uterine hyperæsthesia, unassociated with either ulceration or other inflammation.

It probably would be most often associated also with a profusion of hair, heavy eyebrows, long lashes and full lips, especially upper lip.

For obvious reasons, these are cases the treatment of which requires, as a matter of self protection, great caution on the part of the attendant, if the attendant be of the male kind; and under no circumstances would it be prudent to give such treatment except in the presence of a third person.

I say this without any intended reflection upon the character of the patient, but such conditions may often occur in the process of treatment, that they honestly confound reality with purely subjective fancies. They are generally natures which, at

times, are liable to become independent of all else in the world save their own sensations and morbid deductions, and they are prone to statements which are utterly without foundation and as damaging to themselves as to others. They are apt too, to have a marvelous cunning in the way of weaving a web of false circumstantiality. There frequently goes with all this a certain sweetness of temper, periods of angelic-like nature, and extreme signs of piety, which are well calculated to throw one off guard, but it is nevertheless impossible to exercise too great caution.

Digestion of Milk.—Dr. M. Reichmann draws the following conclusions as to the digestibility of milk in the human stomach.

1. Boiled milk leaves the healthy stomach more rapidly than an equal quantity of unboiled milk.
2. The digestion of boiled milk is more rapidly accomplished than that of unboiled milk.
3. The coagulation of unboiled milk in the stomach is complete in five minutes.
4. This coagulation is not caused by the acid of the gastric juice, but by the influence of a special ferment (milk-curdling ferment).
5. The acidity of the gastric juice is at first due almost solely to lactic acid, and, later in the process of digestion, to the presence of hydrochloric acid.
6. Hydrochloric acid first appears in perceptible amount forty-five minutes after the ingestion of half a pint of milk.
7. For the first hour and a quarter after the ingestion of milk the acidity gradually increases, and then decreases, until the milk has entirely left the stomach.
8. The curds of casein in digestion of boiled milk are much softer than in the digestion of uncooked milk.—*Therapeutic Gazette*.

Stramonium Poisoning.—Dr. C. C. Gratiot thus writes (*Med. and Surg. Rep.*): I found a boy three years of age, sitting in his mother's lap, his arms and hands outstretched as though to grasp some object. He would open and shut his fingers with deliberation, as though the object he was trying to grasp required some caution and skill to take hold of. After two or three minutes of such manœvering he would make a sudden jump as though about to seize the object, and would then cry distressfully.

He would act as though something was approaching him from the opposite side of the room, and would point towards it; his eyes and facial expression would convey the idea that the object was after him, and coming nearer and nearer, until he became so agitated that he seemed on the point of having a convulsion.

These hallucinations would alternate, and the only thing that diverted his attention for an instant would be to offer him a cup of water, which he took with a seeming relish. In the matters vomited during the night were a number of stramonium seed.

Disguising Odor of Iodoform.—Dr. Shufelt has discovered in volatile oil of camphor a means of disguising the odor of, as well as dissolving, iodoform. Dr. Leszingsky says that one part of ground coffee mixed with three parts of iodoform will disguise the odor or the latter.

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MEDICAL COLLEGES IN CLOVER.

SOME of the medical colleges in this city have been placed, by the munificence of wealthy friends, in the past two years in a position for more extended and efficient work. The erection of the Carnegie laboratory in connection with Bellevue Medical College, was speedily followed by the donation by the Vanderbilt family of a million of dollars to the College of Physicians and Surgeons, and now we have to chronicle the donation of one hundred thousand dollars to the University Medical College, for the erection and maintenance of a laboratory to be called the Loomis Laboratory.

In name, all these institutions are non-sectarian, but in reality they are just as partisan as those which bear a sectarian name. Some of them have refused to admit for graduation, no matter what their qualification, students from the offices of new school physicians. The question has been not so much, what do you know, but who are your friends, and what are to be your future associations and ideas of practice? So little confidence have they in their teaching that they must bring the weight of college authority and social fellowship, to hold the young practitioner in the regulation orthodox path.

Our old school brethren have this advantage over our new school friends, that no matter what their practice, in name at least they are non-sectarian, and they can gradually, as they are doing now, absorb the truths of all schools without eating any very large amount of crow. Our new

school friends are thus placed at a disadvantage; however liberal they may be in their practice, in name they are certainly sectarian, and more or less restricted to a single line of therapeutics which closes the door against the minute scientific investigation of the principles which they assert are firmly established, and as unchangeable as the laws of the Medes and Persians. The falseness of their assertions and the fallacy of their reasoning is clearly shown in the admission of some of the great apostles of infinitesimalism that the potencies for which they claimed in public teachings and private practice curative results which seemed almost miraculous, are, so far as medicinal action is concerned, entirely inert, containing not a single molecule of the original drug. If rational thought and scientific investigation has shown the fallacy of the assertion of a leading teacher of materia medica to his class, even to himself, that a single dose of sulphur c.m. was sufficient to destroy an inordinate desire for bathing, may not, in the progress of time, other ideas and other doctrines, made with equal positiveness, prove equally untenable?

The medical mind should be judicial in its action, weighing with the utmost impartiality all evidence which has a bearing upon the case. This is impossible if it is bound to the wheel of a single dogma. The mind is fettered and its decisions may be unjust and not in accordance with facts.

Who can look at the development of science for the past few years without learning at least a lesson of modesty and humility? Old theories and principles supposed to be as immovable as the mountains, have been uprooted and torn into shreds by the development of science. Every department of natural science has had to be rewritten, as investigation has been pushed forward into new fields. Hydrogen, which, in our younger days, we were taught was an imponderable gas, is now compressed into its metallic state; and from oxygen, under the influence of electricity, is evolved ozone. We have abundant evidence that there is no limit to the progress of science, and what may seem fact to-day may to-morrow be proved false.

The study of medicine is essentially a study of biology. This is the basis of medical education

and scientific medical practice. We have learned at least that no one key will unlock all the secrets of nature, and no one principle explain all its mysteries. From the study of biology we learn the cause of the discordant notes in the thousand strings of life, and may possibly evolve therefrom a therapeutics which will cause them to vibrate in harmony.

The facilities which have been placed in the hands of some of our medical colleges for enlarged and more minute scientific instruction, will do more to eradicate sectarian jealousy and advance the best interests of the profession and the health of the public, than any amount of studied arguments or legal enactments. The barriers between schools are already fast disappearing, and if every sectarian flag should be lowered, in a short time the united voice of the profession would be strong and emphatic for that freedom of thought and utterance which can only be evolved by impartial scientific investigation.

If the New York Homœopathic Medical College will ask for the two hundred and fifty thousand dollars for which it has made a strong appeal to the public, for the endowment of a scientific medical college, which shall not be sectarian, but teach the whole science of medicine as it progresses step by step, we shall feel it is entering upon a field of usefulness to which there will be no limit. We have outgrown old issues, and what might have been good policy twenty years ago may now be exactly the reverse. In this age of progress it requires no prophet's eye to foresee and no prophet's voice to foretell the speedy doom of any medical college which stands on the narrow plank of a single dogma. We feel that now is the time for institutions and societies to eliminate from their councils old bitterness and old issues, and stand out boldly for the most careful study and the fullest investigation in every department of our profession.

NATIONAL MEDICAL SOCIETIES.

NOTHING of particular interest marked the proceedings of the American Medical Association at its recent annual meeting at St. Louis. We supposed some marked action would have been taken in reference to the death of Dr. Austin

Flint. He was more than any other man in the profession, the champion of the old code. His name and public utterances were a tower of strength, and yet, in this assembly which had so long looked upon him as a leader, scarcely any notice was taken of his life and public works, except in the few brief words of the President in his opening address. There were but few members present from New York, or any of the great Eastern cities. The present Executive Committee of the International Congress was undisturbed in its work, but, from present appearances, if the Congress meets at all, it will be composed principally of the Executive Committee, with a very small delegation from this country. Scientists from abroad will hardly care to connect their name with such a thoroughly one-sided affair, which must of necessity be a failure.

The meeting of the American Institute of Homœopathy, at Saratoga, in June, will naturally bring together a large number of members, from all parts of the country. The members will without doubt have a pleasant social time, and go back to their work with strength renewed, and brain cells strengthened and quickened by kindly greetings, the luxuries of the table, and the sparkling waters of the springs, but it is doubtful whether any great scientific question will be settled; and yet, if we mistake not, a committee is to report on the potency question. Chemistry, the microscope, and the spectroscope have been set to work to determine the drug value of high potencies. It will never do to limit scientific investigation and free discussion, provided they run in regular orthodox channels, and we shall, no doubt, have some wonderful developments on this question. Already a doubt is creeping into the minds of some of the great writers, teachers, and practitioners, as it regards the presence of a single drug molecule in potencies which have been trusted as specifics in disease, and the question will be an exceedingly interesting one as to the nature of the curative action of these so called remedies.

Possibly a more full and thorough discussion of medical principles might be obtained if the members were not committed by the by-laws to a dogma, which must of necessity influence investigation. At a recent meeting of the Institute,

the suggestion, that its name should be in harmony with the non-sectarian practice of nine-tenths of its members, raised a storm of indignation in which the shade of Hahnemann was apostrophized, and the man who could even hint at a change which would make the society non-sectarian was denounced as unorthodox and consigned to medical perdition. And yet the scientific investigation of the potency question shows clearly that hereafter even the doctrines of Hahnemann will be subjected to a closer scrutiny than they have ever yet received at our own hands. We look to the no distant future when the time honored society, which has done so much for humanity, will not be ashamed or afraid of the fullest investigation, and will cease to bind its members by a single dogma.

BIBLIOGRAPHICAL.

A TREATISE ON BRIGHT'S DISEASE OF THE KIDNEYS. Its Pathology, Diagnosis, and Treatment, with chapters on the Anatomy of the Kidney, Albuminuria, and the Urinary Secretion. By Henry B. Millard, M.D., A.M., Member of the N. Y. County Medical Society; Honorary Member of the Société Anatomique, of Paris; Corresponding Member of the Verein Deutscher Aerzte of Prague, and of the Société D'Hydrologie Medicale of Paris, etc. Second Edition, Revised and Enlarged. New York: Wm. Wood & Co. 1886. pp. 264. 8vo,

In the February, 1884, number of this Journal, may be found a review of the first edition of this treatise, which will hold good so far as it goes, as to the second, which is now before us. It is certainly no small credit to the author that another edition should be called for within so short a time, only about two years. Much new matter has been introduced in the present edition, especially relative to the nerves of the Kidney. Numerous alterations appear here and there, and the chapter on the tests for Albumin in the Urine, has been entirely rewritten to accord with the many thousands of new experiments of the author, since the issue of the former edition, so that it ought to be, and undoubtedly is, a most reliable guide in this important department of medicine.

On the estimation of the amount of albumin in the urine—a point that is not generally understood, or, perhaps in some cases, misconceived on account of the use of words—we read (p. 54), "The amount of albumin seldom exceeds one-half of one per cent.; usually it is less than one-tenth of one per cent.," and the maximum limit is less than two and one-half per cent. The popular fallacy that urine is "fifty per cent. albumin," is due to the fact that on boiling it will seem to become solid, when really it contains no more than one-fifth per cent. albumin!

If space would allow we should be glad to give a resume of the chapter on "The tests for albumin in the urine," and we will endeavor to do so in future; in the meantime, we hope our readers will get the book and read it for themselves. The "picric acid test," the "brine test,"

and the "tungstate of soda test," have all been discarded as unreliable, and the author advises *Nitric Acid, Heat, Tanret's test, and his own test of Phenic and Acetic Acid and Potash.*

The publishers have also done their part of the work admirably, so that the work may be perused with pleasure by all concerned.

PUBLICATIONS of the Massachusetts Homœopathic Medical Society, 1885. Volume viii. Published by Committee on Publication.

While there are many interesting papers in this publication, we note especially the report of the committee on Materia Medica, which contains several important provings of Curare—second and third decimal—supervised and edited by Dr. C. Wesselheft, and also of Xanthoxylum Fraxineum, all of which are worthy of study. The unfortunate part of the matter is, that the publication will reach only a few readers.

THE SURGICAL DISEASES OF CHILDREN. By Edmund Owen, M.D., F.R.C.S., Surgeon to the Hospital for Sick Children, Great Ormond Street, London. 12mo., 585 pages, with 4 chromo-lithographic plates and 85 engravings. Cloth, \$2. Philadelphia: Lea Brothers & Co., 1886.

The author does not claim for his manual an exhaustive treatise upon the subjects treated, but simply to condense within the limits of a small volume the entire subject of the surgery of infancy and childhood. The work has been admirably performed.

SURGICAL DISEASES OF THE KIDNEY. By Henry Morris, M.A., M.B., F.R.C.S., Surgeon to and Lecturer on Surgery at the Middlesex Hospital, London. 12mo., 555 pages, with 6 chromo-lithographic plates and 40 engravings. Cloth, \$2.25. Philadelphia: Lea Brothers & Co., 1886.

The manual contains a brief description of the normal regional anatomy, and a pretty full account of the malformations and other abnormal anatomical conditions of the kidney, together with their diseases and the various operations necessary.

A MANUAL OF SURGERY. In Treatises by various Authors. In three volumes edited by Frederick Treves, F.R.C.S., Surgeon to and Lecturer on Anatomy at the London Hospital. Vol. I., General Surgical Affections, The Blood-vessels, The Nerves, The Skin. Vol. II., The Thorax, The Organs of Digestion, The Genito-Urinary Organs. Vol. III., The Organs of Locomotion and of Special Sense, The Respiratory Passages, The Head, The Spine. pp. 1866, 213 engravings. Per volume, cloth, \$2. Philadelphia: Lea Brothers & Co. 1886. 12mo.

The work comprises a concise account of the leading facts and principles of modern Surgery. The subject is separated thus: 1. Surgery in its Clinical and Therapeutic Aspects. 2. Surgical Pathology; and 3. Operative Surgery. A most useful handbook for students and for the busy practitioner.

ANNUAL REPORT of the National Board of Health, for the year 1885.

SECOND REPORT of the State Board of Health, of the State of Tennessee, October, 1880–December, 1884.

DISEASES OF THE SPINAL CORD. By Byrom Bramwell, M.D., F.R.C.P. (Edin.), Lecturer on the Principles and Practice of Medicine, and on Medical Diagnosis in the Extra Academical School of Medicine, Edinburgh; Pathologist to the Edinburgh Royal Infirmary, etc. Illustrated by fifty-two full page lithographic plates, in colors, and many fine wood engravings. Being Vol. I. of Wood's Library for 1886. New York: Wm. Wood & Co.

The first edition of this admirable work on the spinal cord was translated into the German, French, and Russian languages, and was very favorably received by the medical press of England and America. The author has submitted the second edition to a careful revision, and has added important matter upon the subjects of concussion of the spine and the methods of examining railway cases.

INSANITY AND ITS TREATMENT. Lectures on the Treatment, Medical and Legal, of Insane Patients. By G. Fielding Blandford, M.D., (Oxon.), F.R.C.P., in London; Late Lecturer on Psychological Medicine at the School of St. George's Hospital, London. Third Edition. To which is added Types of Insanity. An Illustrated Guide in the Physical Diagnosis of Mental Diseases. By Allan McLane Hamilton, M.D., one of the Consulting Physicians to the Insane Asylums of New York City, and the Hudson River State Hospital for the Insane. Illustrated by ten plates from photographs of cases selected as types, with descriptive text. Being Vol. II. of Wood's Library for 1886. New York: Wm. Wood & Co.

The third edition of the very able lectures of Dr. Blandford has been rendered more valuable by important additions, and by the addition, in a separate treatise at the close of the book, of Dr. Hamilton's illustrated types of *Insanity*.

A SYSTEM of Medicine based upon the Laws of Homœopathy. Edited by H. R. Arndt, M.D., in three volumes. Vol. III. Philadelphia: Hahnemann Publishing House. F. E. Boericke, 1886.

The system of medicine edited by Dr. Arndt, and completed in the present volumes, has been the result of the careful study and experience of physicians of the new school, to each of whom had been assigned some special work, to which he had given particular attention. These essays have been arranged by the editor in proper order, so as to form a complete system of medicine from the homœopathic standpoint. The essays coming from so large a number of contributors, are of necessity of different degrees of ability and practical value. All, however, show a wide range of reading and ability in the discussion of the subjects. If the editor has erred in making out his list of contributors, it has been in assigning to comparatively young men, the discussion of subjects which should have embodied, not only scientific culture and extensive reading, but the ripe experience of age. In therapeutics no amount of reading or of pathological knowledge can make up for the experience gained by close observation in the sick room. As a whole, the work will be found of marked value and will no doubt find its way into the libraries of those of the old as well as the new school.

P. PLAKISTON, SON & CO., Philadelphia, issue a Students' Manual of Venereal Diseases, by Berkeley Hill, M.D., and Arthur Cooper, M.D. Within the space of 132 pages are included a concise description of venereal diseases and their

treatment. The strong points are so clearly given that the student will find this little volume an excellent refresher to his memory, and admirably suggestive.

THE AMERICAN HOMŒOPATHIC PHARMACŒIA. Third edition. Thoroughly revised and augmented by Joseph T. O'Conner, M.D. Compiled and published by Boericke & Tafel. 1885.

The compilers of this recognized standard work have endeavored to give all the directions necessary to prepare the exact article used by the provers of any drugs. In addition to all the standard drugs, there is also included many of but little value.

The Century Magazine for May contains a most interesting account of the hearing before a congressional committee, of James Russell Lowell in behalf of International copyright. It says:

"But the great value and force of Lowell's argument lay in the fact that he had lifted up the whole discussion from the level of interests and expediencies into the clear air of duties and moralities. While he said with all distinctness and with iteration that, so far as human foresight could determine, the granting of foreign copyright would benefit American literature, would not make books dear, and would be for the good of the whole country, with still greater emphasis he upheld the leading issue. Said Lowell: 'I myself take the moral view of the question. I believe that this is a simple question of morality and justice; that many of the arguments which Mr. — used are arguments which might be used for picking a man's pocket. One could live a great deal cheaper, undoubtedly, if he could supply himself from other people without any labor or cost. But at the same time—well, it was not called honest when I was young and that is all I can say. I cannot help thinking that a book which was, I believe, more read when I was young than it is now is quite right when it says that 'Righteousness exalteth a nation.' I believe this is a question of righteousness. I do not wish to urge that too far, because that is considered too ideal, I believe. But that is my view of it, and if I were asked what book is better than a cheap book, I should answer that there is one book better than a cheap book, and that is a book honestly come by.'"

THE Fifteenth Annual Report of the State Homœopathic Asylum for the Insane, at Middletown, N. Y., gives a very satisfactory exhibit of the work of the institution during the past year and its present prosperity. The daily average number of patients during the year, was 329. The percentage of recoveries on the number discharged, was 50.38, and the percentage of deaths on the whole number treated 5.5. If we deduct the number brought to the asylum during the year in a dying condition, the death rate on the number treated, would be less than four per cent. It will be perceived the record of the institution compares favorably with that of any other in the world.

Hydrogen Peroxide in Epilepsy.—B. W. Richardson, M.D., reports hydrogen peroxide in the treatment of epilepsy. A drachm of the ten-volume solution was given three times a day in half a tumbler of water, the quantity being gradually increased to two or three drachms. The metallic taste is said to be reduced by the addition of a drachm of glycerin.

CORRESPONDENCE.

ENDOWMENT OF THE NEW YORK HOMŒOPATHIC MEDICAL COLLEGE.

THE faculty of the New York Homœopathic Medical College has projected a plan for the endowment of that institution. The profession and patrons of the new school are invited by a circular issued by the Board of Trustees of the College to contribute \$250,000 for the purpose of enlarging the college, equipping its chemical and physiological laboratories, and in other ways increasing the facilities and usefulness of the institution.

On the face of it, this looks like a praiseworthy project; but, let us for a moment pause to reflect. The institution which the public is invited to endow is distinctively homœopathic. Its corner-stone is the Therapeutics of Hahnemann, pure and simple, its truths and fallacies, sense and nonsense, mingled in but slightly modified proportions. The Institution does not represent medical science and art, but rather Hahnemann and Homœopathy. Is it not rather late in the nineteenth century, Messrs. Trustees of the New York Homœopathic Medical College, to appeal to liberal and intelligent men for aid to endow and dedicate to science, an institution of learning devoted to the promulgation of one idea, and that idea embodying a fragment of the truths of therapeutics? It may be well enough for religious sects to establish institutions for teaching and disseminating their own peculiar ideas, or want of ideas, although it is rather late in the century for them even; but it is a gross scandal, in science, for medical men to indulge in such antiquated anomalies. The public has recently witnessed, part of it with admiration, part of it with apprehension, the endowment, on a magnificent scale, of a sectarian medical college in this city, an institution which has publicly declared it will not admit to its privileges the pupils of new school men on the same footing as those of old school men. Who is so blind as not to be able to see that it is an obstruction to scientific progress to build up and perpetuate institutions of learning which are dominated by such a spirit? Every such an institution is an enemy to a liberal and intelligent age, and serves to hinder the development of scientific truth. It is an act of mistaken philanthropy, therefore, to help them on; and we feel assured that the promoters of this scheme for the endowment of an institution of an opposite, although equally sectarian, medical creed, will receive but negative encouragement from the liberal

element of its own school. It must therefore suffer defeat.

New York needs neither old school or new school colleges. It is suffering from affluence of both. Its real need is a SCHOOL OF MEDICINE AND SURGERY, independent and liberal, wherein the student of medicine shall be taught the truth, the whole truth, without fear or favor of medical sects. The time is ripe for such a school; the occasion auspicious. It is a pity it should not be improved. Let sectarian names be dropped, and sectarian teachings be abandoned by medical institutions. What a magnificent spectacle, that of a Chair of "Institutes of Medicine," and a Chair of "Therapeutics" from which the pupil shall learn all that there is known of Medical Philosophy, and be impartially taught the various means and methods of curing disease, and be free to make an intelligent choice! Let no one fear that the truth of homœopathy would suffer by such a state of things.

We sincerely wish that the Faculty and Trustees of the New York Homœopathic Medical College could be made to see their way clear to adopt the suggestions we make herewith, namely, either to drop the term "homœopathic" from their Charter, and with it its devotion to Hahnemann, or broaden their curriculum so as to embrace Old School Therapeutics. By this means they would facilitate their endowment scheme and improve the status of their graduates, since the latter would escape the odium which they now suffer, that of a one-sided or partial medical education.

DR. BANNING'S APPLIANCES.

To the Editors of the N. Y. Medical Times:

I HAVE read in the NEW YORK MEDICAL TIMES Dr. E. P. Banning's, Sr., articles on "Physiological Centripetality," and wish to add my mite confirmatory of what has been said on the subject, and in order to do so practically, I will cite a few cases in which I have used the appliances. My first experience with Dr. Banning's brace, was over twenty years ago, when it was not up to its present efficiency in mechanical construction. Mrs. P., age 35 years, had been troubled for some years with a tumor in the uterus. She had been in several hospitals, and all pronounced her case incurable. At every menstrual period, the uterus would be prolapsed; and the pressure was so great that she would sink into an insensible condition, and remain so until the uterus was lifted into its natural position, and retained there for a time, when normal conditions would return. Dr. Banning's body brace, without spinal, or shoulder attachment, cured all further trouble. Menstrual periods were normal after the application of the brace. It is equally as beneficial in all curvatures of the spine, and far superior to anything in the line of plaster of paris torture. I have used the brace in all kinds of uterine displacements, usually curing them without the pessary attachment; which the Doctor calls his little "buggy," consisting of a ring that

does not press on any part of the vaginal wall, but receives the os in the ring; which ring is held *in situ* by a spiral spring, and is attached to the brace outside the pelvis. I will give the history of one case only, of the use of the little "buggy." Mrs. F., age 45, had what may well be called a drunken uterus; it would antevert, retrovert, prolapse, and fall all around the pelvis, as the patient changed position; the woman was bedridden, unable to stand on her feet for a moment, and had been in this condition for several months. The brace with the little uterine "buggy" attachment was applied; she immediately assumed the erect position, going about her household duties, and after a few months' use of the support laid it one side perfectly cured. The brace is not only the best instrument known for all uterine troubles, but is equally as good for spinal troubles, either in male or female. I have used it myself in a severe spinal irritation, produced by long rides of fifty miles a day, over rough roads, producing a concussion of the spine.

I consulted Dr. Banning, and he applied a brace; the effect was immediate: it relieved all pain and irritation, and I can now ride fifty miles a day, provided I have on the brace.

The sensation in wearing this instrument is exquisite making the wearer feel invigorated. To the medical profession I can cheerfully recommend Dr. Banning's appliances; give them a trial. The Doctor has spent a long and useful life in this one direction, and has made a complete success of his appliances for the cure of all uterine, rectal and hernial displacements, as well as in all spinal curvatures and irritations.

C. A. BELDIN, M. D.,
Jamaica, L. I.

[NOTE.—We cheerfully concur in what Dr. Beldin reports, as it accords with our experience. Dr. Banning can be addressed at 102 East 54th Street, New York.—EDS.]

OUR LONDON LETTER.

To the Editors of the N. Y. Medical Times:

ON the 10th of April last an old and admirable custom was revived by the British Homœopathic Society—the custom of celebrating Hahnemann's Birthday. The celebration, as in the earlier times, took the form of a dinner. About 60 members and their guests sat down together at the Holborn Restaurant, presided over by the President of the Society for the year, Dr. Mackenzie. It was a most pleasant gathering, and I have no doubt that the custom will not be again allowed to die out. At the same time, it was felt that the affair was too swell and select to form an adequate celebration of Hahnemann's day. The general public were very poorly represented, and the pharmacists were not represented at all. May I suggest to my transatlantic friends that Hahnemann's day should be kept as a festival by all who revere his name, and have experienced, either as medicine men or patients, the benefits of his labors? It is the intention of his followers in this country to keep his memory green.

The Homœopathic League has got to work. The first of a series of "Homœopathic League Tracts" is in the press and will shortly be published. It is entitled "Why should the Friends of Homœopathy form a League?" It is an eight-page tract and an idea of its contents may be gathered from the following sub-headings: "Treatment of Practitioners of Homœopathy by their Allopathic Colleagues;" "Injustice of this Treatment;" "Injuries

thereby done to Patients;" "Charge of Ignorance against Practitioners of Homœopathy;" "Homœopathy not Unscientific Practice;" "Acknowledged Unscientific Character of Allopathic Practice;" "Homœopathy not Irregular Practice;" "Homœopathy not Opposed to Pathology;" "Homœopathy a Real Reformation of Therapeutics;" "Fair Play for Homœopathy can be obtained by the non-medical Public;" "Persecution for Medical Opinion Unworthy of Men of Science;" "Need of United Action;" "Tracts to Follow This One." The League has the support of Drs. Hughes, Pope, Dudgeon, Clifton, Dyce Brown, Harris and almost all the men who have shown much activity in the cause of homœopathy outside the sphere of their immediate practice. It has also a strong lay support and the promoters wish to put the working of the League into the hands of the laity as soon as an energetic executive committee can be got together. In the meantime a steady leavening is going on.

The need of some association for propagating knowledge of homœopathy cannot be doubted by those conversant with the facts. Even among our own patients, the ignorance of the homœopathic principles is very great, and the general public have a vague notion that it is a system of pills and small doses; while among the profession—the pharisaic caste—the ignorance is still greater than among the people; and the profession never will take notice of homœopathy until compelled to do so by the public. Here are the objects and rules of the movement:

OBJECTS:

- "1. To give a popular explanation of homœopathy and to show that it is founded on reason, science and experience.
- "2. To defend homœopathy from the misrepresentations of its opponents and to obtain fair treatment for it.

RULES.

- "I. That the League consist of a President, Vice-Presidents, Executive Committee, and ordinary Members, and that ladies be eligible for membership. That branches be formed in provincial towns.
- "II. That membership be open to all persons, lay or medical, on payment of a yearly subscription of not less than half-a-crown.
- "III. That the means to be adopted by the League be the production and distribution of literature, public meetings, popular lectures and other such means as the Association may deem desirable.
- "IV. That the government of the League be vested in a Central Executive Committee, to whom the details of the work shall be entrusted."

The fifth edition of Dr. Hughes' "Pharmacodynamics" is announced, but I have not yet seen a copy. The "Pathogenetic Cyclopaedia" advances with commendable rapidity, the third part having already appeared. Dr. Dyce Brown has published his Hahnemannian oration "The Reign of Law in Medicine," and it forms a very telling little brochure.

The time of the Brussels International Homœopathic Congress is drawing near, and those of us who were present at the London Congress in 1881 are anticipating the pleasure of seeing once more many of the old friends from America, the sight of whose faces did us so much good then. Brussels is a city well worth seeing, and those who care for other things besides homœopathy will find much to interest them.

Pasteur's patients continue to die. The mortality among the Russians, whether dog-bitten or wolf-bitten, has been so great that one of the Paris journals wickedly suggested that M. Pasteur was on the way to avenge his country of the retreat from Moscow! M. Pasteur, like other patent medicine men, has a keen eye for business. The Paris correspondent of the *Weekly Dispatch* (May 2d) has some pertinent remarks on his money-making proclivities. He says:

"It is not generally known that Pasteur and his friends were engaged a short time ago in a hot campaign in favor of rendering canine inoculation for rabies obligatory. The fee was to be a low one. As there are four millions of dogs in France, and as the State would probably have subsidized the savant and given him a country residence at St. Cloud, where he could have a quantity of dogs, guinea-pigs and rabbits, as 'soil' for the culture of the virus, he would have thus cleared £160,000 sterling. When this campaign fell through, the movement for the Pasteur Institute was instigated. The estimate given to the public of its probable cost was £80,000 sterling. This was a notable coming down from the income that was to have been reaped from the obligations by inoculation.

Yours Fraternally,

JOHN H. CLARKE, M.D.

15 St. George Terrace, Gloucester }
Road, London, S. W., May 4. }

OBITUARY.

Dr. Dio Lewis, the well-known hygienist and philanthropist, died in Yonkers, N. Y., May 21st, æt. 64, from erysipelas, the result of an injury from being thrown from a horse. Dr. Lewis was a man of great force of character, an able lecturer, and devoted his energies, at one time, to the development of physical culture, and to his efforts, posterity will owe a large debt for originating and popularizing the light gymnastics for schools.

He was a voluminous writer and published the following books: "Talks About Health," "Weak Lungs and How to Make Them Strong," "Talks about People's Stomachs," "Our Girls," "Our Digestion," "Chats with Young Women," "My Four Husbands," "Chastity," "Longevity," and "New Gymnastics." Dr. Lewis came to this city several years ago to live, and published *Dr. Dio Lewis's Monthly* for a time. He completed a short time ago a book called "The Dio Lewis Treasury," which is to be published soon. Although eccentric in many respects, his genius lie in his power to impress others with his arguments, and we feel that the world has been made better for his having lived.

TRANSLATIONS, GLEANINGS, ETC.

REPORT ON OTOTOLOGY.

• BY T. M. S.

VASCULAR DEAFNESS.—Dr. Robert T. Cooper (*Hom. World*) refers to this condition as a basic aural dyscrasia, producing tinnitus and deafness, and defines it thus: "By vascular deafness: I mean a variety of impaired hearing, unattended by visible alteration of or destruction in the tissues of the ear, and not fairly ascribable to the blocking up of the external meatus, or of the Eustachian tube, or to hyperplasia of the anatomical elements of the middle ear,

nor yet to paralysis of the auditory nerve." The doctor describes three kinds of deafness: first, obstructive deafness or obstructed hearing, typical examples of which we have in ceruminous impaction of the meatus, and catarrhal blocking up of the Eustachian tube; second, exhausted hearing or nervous deafness, properly so-called, with a history of a sudden onset, generally attended with a sensation of numbness and deafness of the ear, often following an exhausting mental strain, showing a condition closely allied to paralysis. Obstructed hearing and exhausted hearing agree in this: that the deafness is marked, the onset sudden, and sometimes as equally sudden dispersion; the third form is the enfeebled hearing, or vascular deafness. Dr. Cooper thinks that this condition is due to imperfections in the muscular coats of the blood-vessels supplying the ear, and that its onset is referable to the consequences of an irritation that has lingered, it may be for years, upon the coats of the larger blood-vessels, and which extending to those of the ear, gradually saps from them the vigor necessary for the maintenance of the healthy activities of the organ—and this, too, without the patient being in the least cognizant of the terrible mischief that is brooding. Consequently, he regards this enfeebled hearing as simply the expression of long-continued irritation that has seized upon the aural vascular plexus; that it is therefore almost invariably accompanied, whether deafness be present or not, by venous and arterial bruits, which can be readily detected by the stethoscope in the cervical blood-vessels; that by paying attention to the condition of these blood-carrying channels we can often anticipate, and therefore forestall, the coming on of this most intractable but not incurable form of deafness. When both ears are affected, and this is more common in vascular than in nervous deafness, the left is generally the more seriously affected in vascular, the right in nervous deafness.

Dr. Cooper gives the following conditions indicating the use of the picrate of iron; marked hepatic inertia, coated tongue, constipation, dark circles round the eyes, and a bilious complexion—a counter irritation, the presence of actual chlorosis, and not, be it remembered, of mere anæmia.

Heat or Cold in Aural Inflammations.—Dr. Hamilton, of Dublin (*Hom. World*), used at the bedside to well observe, that the surgeon is seldom placed in a position so uncertain and unscientific, as when, face to face with an inflammation, his opinion is called for in the determination of the simple question, whether cold or hot water will prove the more efficacious. This difficulty is an undoubted one, as we encounter it upon a large scale in the medical and surgical wards of an hospital. It does not apply, however, to the inflammatory conditions met with in the ear; for here we deal with an inflammatory action, the drift of which is distinctly, from first to last, retrograde and debilitating.

The chronic diseases of the ear involve it in an inflammatory process that requires for its successful dispersion the application of as much warmth of every description as possible; at all events, warmth constantly and perseveringly applied is essential for the complete rehabilitation of the ear when it has been subjected to a long continuance of the exhausting and degenerating inflammation that affect its circulation. A clinical axiom is, therefore, that acute or chronic diseases of the ear are improved by warmth and aggravated by cold. Thus, a writer says: "A wearing of a wig has been known to improve the hearing." And what is more natural than that an organ which, in its normal condition, is so little exposed to variations in tem-

perature, should endure such exposure badly, and undergo a loss of its functions?

Tuberculosis of the Middle Ear.—(Hebermann, *Rev. Mens. d'Otology*.)—Five cases are reported, in which he found miliary tuberculosis and the bacilli in the mucous membrane of the middle ear, and in the labyrinth. The infection can come, he thinks, either by the circulation, by a perforated tympanum, or by the Eustachian tube, the latter being the most common.

Fracture of the Handle of the Malleus from a Blow on the Ear.—(*Ibid.*)—The patient complained from time to time of buzzing sounds in the ear, and that when he was eating, warm air seemed to pass out of the ear. Examination showed the membrane and vessels of the malleus very much injected. Its extremity enlarged and reddened, was separated from the rest of the handle, and dislocated from before downwards. Towards the posterior periphery there was a fold which started from the separated portion. Above this there was a perforation the size of a pin-head, with tumefied edges. By degrees the parts united, and the seat of fracture was only marked by a transverse line, which was of a pale red. The cone of light returned. The perforation had extended towards the anterior inferior periphery of the tympanum. There had not been any suppuration. If the man told the truth, the fracture was the result of a light blow upon the ear, and acting directly upon the handle.

Exostosis of Auditory Meatus.—Dr. Knapp (*Arch. of Otology*)—reports a case where the exostosis filled up the canal, and grew from the posterior wall. The operation took one and a half hours, and was performed by chiseling into the bony tissue around the tumor.

Dr. Jacquemart (*Rev. Mens. d'Otology*) reports another case, where the tumor so filled the canal that a fine probe could not be introduced. By means of the galvano-cautery, applied at the highest point, he was able to make an opening, and then seizing the growth with a forceps, brought it away. The membrane was found to be intact, and the hearing was restored in a short time.

Tubercular Tumor.—(Dr. Ogilvie, *Medical Chron.*)—A young lady, aged 22, had aural symptoms simulating labyrinthine vertigo, or Meniere's disease, but where the cause was due to a tubercular tumor of cartilaginous appearance springing from the dura mater lining the right half of the posterior face of the skull. The symptoms were, double optic neuritis, severe vomiting, deafness of the right ear, pain at back of the head, with staggering to the right side. The right membrana tympani, middle ear and Eustachian tube were apparently healthy. The portio mollis and medulla were destroyed by the tumor.

Cocaine in Earache.—(*Arch. of Otology*.)—Dr. Hobbs has relieved several cases of acute otitis media by injecting two drops of a two per cent., and later a four per cent. solution, into the middle ear through the Eustachian tube. This would control the pain for several hours, and when it returned, a spraying of the corresponding nasal cavity with cocaine and glycerine, and performing Valsalva's method of inflation, were sufficient to control it.

Tumor of the Malleus Handle.—(Dr. Miot, *Rev. Mens. d'Otology*.)—The tumor was opaque, pale yellow, crossed by vessels on its superior portion. It was sensitive to touch, hard, and strongly adherent to the handle of the malleus, whose inferior extremity appeared a little larger than normal. It was removed with a knife curved on the flat, cutting parallel to the tympanum, and from below up-

wards. The seat of the tumor was cauterized with a weak solution of chromic acid, and washed with alcoholized water. The outer or cortical portion of the tumor was formed of connective tissue, with fibrous bands running in concentric curves, and fusiform cells with well marked nuclei surrounded with small granules. The central portion was formed of embryonic cells with large nuclei, distributed through the loose connective tissues. When examined, a long time afterwards, the tumor had not returned.

The Mechanical Treatment of the Membrana Tympani and the Ossicula Auditiva.—(*Jour. Med. Sci.*)—Dr. Homel has made the following experiments: By pressing suddenly upon the tragus, he produces an air-tight cavity, and the condensed air is impinged upon the membrane, and the latter driven downward. Now, removal of the pressure gives an opportunity for the compressed air to expand, and there is at the same time a recoil on the part of the membrane from its tension, so that each movement inward of the membrane is followed by a counter movement outward with all its attachments. Dr. H. believes that a rhythmic motion of 120 vibrations per minute possesses the greatest advantage, as this produced the best results in his own case. He suffered from chronic aural catarrh, and all forms of treatment had failed to give relief. He began the "tragus pressure" in 1881, his hearing being 10 c.m. for watch in the left ear, and 160 c.m. in the right ear. Bone conduction was good on both sides. At present, the hearing is 610 c.m. in the right ear, and 40 c.m. in the left. An opacity, observed in the right membrana tympani, before this treatment began, is said to have disappeared. This result is attributed to the stimulation of the lymphatic system in the membrane, and a consequent absorption of the products of inflammation.

In another case—catarrh of the drum—the hearing rose from 160 c.m. to 610 c.m.; in another—perforation in the left membrane—the hearing rose from 5 c.m. to 160 c.m.; and in another—chronic aural catarrh, with great opacity of the membrane—an improvement of 12 c.m. to 349 c.m. This treatment is recommended for the deafness of old age, since, by its use, ankylosis of the ossicles, the chief evil in the deafness of old age, is warded off. While the treatment is entirely harmless, yet if used too often and too long at a time, some pain in the ear is excited. It is to be employed from four to six times daily, about 120 times in a minute, for a minute or a minute and a half, thus bringing about from 800 to 1,000 movements in the membrana tympani and the auditory ossicles.

Dr. Burnett, who reports the above, adds, that in the production of the passive motions in the membrane and the ossicles by this method, and all methods which depend upon the motion in, or of, the meatus and cartilaginous part of the auditory canal, the action of the fascia in front of and just above the tragus, also of that part of the deep temporal fascia extending along the anterior margin of the osseous meatus until lost in the anterior ligament of the auricle, must be taken into account. According to some authors, the membrana tympani can be made tense by traction on this tissue, especially that part known as the membrana flaccida, which is composed in its outer layer by the skin of the auditory canal; while its inner layer is a reflection of the mucous membrane from the attic of the tympanum. Motion in or traction upon the membrana flaccida would be likely to convey some moving force to the upper parts of the ossicles, and thus effect passive motion in these parts.

Otitis Hemorrhagica.—(Dr. McBride, *Arch. of Otolaryngology*).—The early stages of inflammation are characterized by distension of the arteries, and when this occurs within a cavity like the tympanum, is very apt to be followed by rupture of the arterioles. When the Eustachian tube is obstructed and the membrane thickened so that it will not move, the intra-tympanic structures are under less pressure than other parts of the body, on account of their form and position, and thus favorable to the development of inflammatory hemorrhages.

Brucine as an Anæsthetic.—Dr. Burnett (Dr. Pierce in *Med. Chron.*) advocates the use of a five per cent. solution in water (with about five drops of hydrochloric acid to the gramme of brucine). Soak a piece of cotton and press firmly into the external meatus.

Dr. Zeiss (*Idem*) regards the effect of brucine as more lasting but less certain than cocaine. It is not of service when applied to the skin, but of value in furuncles of the external auditory meatus, and in suppurative middle ear diseases. In a few instances, after the application of brucine to the nasal cavities, the patients felt "wildly nervous" for some hours.

A Granuloma with Hair Contents.—M. Kuhn (*Annales des Mal. de l'Oreille*), reports having seen a tumor removed from the auditory canal, which was interesting from its special structure. The snare met with resistance on removal, which was afterwards found to be due to the number of hairs imbedded in the substance of the tumor. The patient had been in the habit of cutting off the hairs at the entrance to the meatus, which falling into the canal, and collected at the bottom by the astringent instillation used for the otorrhœa, had been incorporated into the tumor during its growth.

Trephining of the Mastoid Apophysis.—Death from Iodoform Poisoning. (M. Kuhn, *Idem*). The patient died four weeks after the opening of the mastoid. Ten days after the operation the patient was eating well and the suppuration was greatly diminished, so that a stick of iodoform, 2 mm. long and 2-3 mm thick was introduced every day into the wound. The patient continued to improve and a few days later went outdoors. On the 25th day after the operation there was a sudden rise of temperature to 40°. 2, with restlessness and delirium at night. On the next day hallucinations, could scarcely recognize his surroundings. On the third day, the persistence of the cerebral symptoms with high temperature and the presence of the characteristic eruption, led to the suspicion of iodoform poisoning. Phenic acid was used as an injection, and a drainage tube inserted. The unfavorable symptoms persisted and were followed by renal and intestinal hemorrhages, collapse, and later death from dyspnoea due to pulmonary infiltration. Autopsy.—Old tubercular lesions in the right lung; marked hemorrhagic extravasations in the intestines; large intestine filled with clots. The spleen was slightly swollen, soft and friable. Kidneys enlarged to double their normal size; tissue soft, friable, filled with blood, in a word, all the signs of an acute, parenchymatous nephritis sharply developed. The warning is given against the use of iodoform where there is a latent tubercular taint.

Meniere's Disease in Leucæmia.—(Dr. Blau, *Annales de l'Oreille*).—The patient suffering with leucæmia had, at three separate intervals, attacks of Meniere's vertigo. At the autopsy there was found an exudation into the labyrinth, with proliferation of the connective tissue, and bony

tissue of new formation. This is the fourth case observed. Two have been described by Gottstein and one by Politzer.

Dry, Bilateral, Catarrhal Otitis Media. Left Auditory Scotoma.—(Dr. Sougii, *Annales de l'Oreille*).—Right ear. Normal auditory canal, tympanic membrane opaque, losing itself gradually in the skin surface of the meatus. Cone of light absent. Very little perceptible motion of the membrane. Naso-pharyngeal catarrh. Eustachian tube permeable. Air inflation caused a rude, dry bruit. On closing the opposite ear, the diapason at 2 of Politzer was heard at 25 cm., the acumeter at 2 m., the whisper at 1 m. Riussi's test negative. Left ear. Normal canal, tympanic membrane opaque, especially at the periphery, concavity not perceptible. With the Valsalva, Toynbee and Siegle's tests, the periphery remains motionless but the central portion moves. The Eustachian tube permeable and there is no exudation into the tympanic cavity. Politzer inflation caused the same sound as in the right. Riussi's test negative. Whispered word at 1 m., acumeter at 2 m., diapason at 25 cm. When the diapason was brought towards the ear, the opposite one remaining closed, it could not be heard from 15 cm., to 10 cm. On the 30th day of treatment the negative area had disappeared.

Another interesting case is reported from Baratoux's clinic. In this case there was cicatricial depression anterior to the cone of light. At the beginning of the treatment (catheterizations and balsamic insufflations), the watch could be heard on the right side at 2 cm., and on the left at contact. After two months the watch could be heard on the left at 19 cm., and on the right from 20 to 16, and from 13 to contact; from 16 to 13 it could not be heard. Does scotoma always accompany the difference in tension of different regions of the membranes? Experimental study upon the vibrations of membranes in regions of different tensions can only determine the explanation of these phenomena.

Unskillful Manipulation for Foreign Bodies.—(*Jour. of Med. Sci.*) In the first case, the woman stated that a pin had slipped into the ear, and the physician, taking her statement as correct, made use of the forceps to remove it. After much prodding he finally grasped something, and aided by the husband making traction on his arm, brought away neither a pin nor a portion of one. When seen later by a specialist, there was purulent secretion, and a polypus in the canal. After treatment a piece of semi-dead bone came away, probably from the edge of the tympanic plate, and in a short time the ear was healed and the hearing improved.

The second case, a child of 7 years, who had put two lentils in each ear. They did not give her any distress but the physician attempted to remove them with forceps but without illumination. The treatment caused hemorrhage, and the child being restless, the further treatment was postponed until next day, when, under chloroform, the ear was emptied of its contents, and the other ear the third day afterwards. When seen the auditory canals were swollen, deprived of epidermis and filled with pus. Both membranes were lacerated, hearing almost entirely gone. Improvement gradually took place, suppuration ceased, the membranes partially healed, and the hearing became for the watch on the right 5-150, and on the left 3-150, and so remained.

Neglected Ear Disease in Infants.—Death.—Dr. Sexton (*Archives of Pediatrics*) writes, that grave and fatal ear disease in early life is more frequent than is supposed. In-

flammation of the middle ear tract may arise from head catarrh or other cause, and rapidly extend to the dura mater without a warning discharge. Or the discharge, on account of closure of the opening in the drum membrane, may be turned into the Eustachian tube, which is proportionately large in infants. He reports two fatal cases, the first had otitis media purulenta, polypus, facial paralysis, and pachy-meningitis, the child being six months old. The second case, a baby seven months old, was one of otitis media purulenta, complicated with lymphadenoma of the neck, resulting in caries of the atrium, attic, antrum, tympanic and auditory plates; facial paralysis and purulent meningitis were followed by death. In Case 1, little nervous irritability existed during the progress of the disease, although the ear was deeply attacked, the child suffering but little except in the last two or three weeks. To the retention of secretions, the formation of which was actively promoted by three weeks' persistent poulticing, and perhaps also to vigorous syringing, was doubtless largely due the gravity of the case. When we consider the proportionately large area of the middle ear tract in children, and that the tympanum, antrum, and Eustachian tube are in dangerous proximity to the dura mater, separated only by a thin layer of bone, often imperfectly closed, we need not be surprised at the frequency of its invasion by disease.

Deaf Pupils and their Treatment.—(Dr. S. Sexton; *Archives of Pediatrics*).—Oftentimes the existence of deafness in children is not definitely determined until of an age when they should begin to talk and even then their slow intellectual development may not be attributed to defective hearing. Partial, but disqualifying, deafness is thus liable to be overlooked until school education is attempted. A number of children were found to be of a class not provided for, being too deaf to hear at school and yet not deaf enough to be taught as deaf mutes. Hearing children naturally pick up their earlier education without effort of parents or by themselves, but deaf children must be unremittingly taught at close range; words must be uttered directly into the ear, not loudly, but distinctly. Tubes are of value in conducting sound to the child's ear where close contact of the mouth is inconvenient, and the child should be encouraged to repeat its own words through the tube to its ears, so as to compare its own voice with the instructor's. If this course be pursued early enough, but few children would be found without any hearing sense, and many who have considerable hearing likely to be lost from disuse would gradually be improved. The greatest difficulty encountered at first is in overcoming inattention on the part of deaf children, who are disposed to rely on the sense of vision, since it offers so much easier a method of conversing. Where it is possible to avoid doing so, a deaf child should not be taught alone, but placed in company with hearing children. The training of deaf children should begin much earlier than hearing pupils. Where deafness has occurred after the pupil has learned to talk, unsparing efforts should be made to retain this faculty, or dumbness may result.

Necrosis of the whole Bony Labyrinth, and Separated as a Sequestrum.—(Archives of Pediatrics).—The patient was four and a half years old, and was admitted with the usual appearances produced by abscess beneath the periosteum over the mastoid process, with probable suppuration in the mastoid cells. There was absolute deafness upon that side. The condition followed an attack of scarlatina, eighteen months before. Facial paralysis was complete.

The discharge continuing, the external opening was enlarged by a semicircular incision behind the ear, when the probe detected a loose sequestrum, which when removed was found to be the whole labyrinth and this alone. The wound soon healed, all discharge ceasing in a week. The facial paralysis also improved, but is not reported as being complete. Two other cases are referred to by the author (Pyer), which have been reported of this condition. No reference, however, is made to the presence or absence of Meniere's disease. Dr. Phillips (*Brit. Med. Jour.*) adds another case. Child five years of age; no history of scarlatina.

Dulcamara in Catarrh of the Middle Ear.—(N. A. Jour. Homoeop.).—Dr. Fowler gives six cases in which he used this remedy with benefit, and adds: Five of the cases were of short duration and sub-acute in character. The severe pain and violent inflammation of acute catarrh of the ear were absent, as well as the tissue changes, adhesions, and other conditions found in chronic catarrhal otitis. Many cases of the subacute variety are benefited by inflation, but they soon relapse and become chronic. Remedies to relieve the catarrhal condition of the ear, Eustachian tubes, nasal cavity and pharynx are demanded, and dulcamara is one of them. At least it has proven efficacious in this portion of the "lower lake region" (Rochester). In the spring and fall we have much cold, damp, foggy weather, and it is then that patients show a marked aggravation in catarrhal conditions. It is also of value in chronic catarrhal inflammations. It not only serves to remove the ill-effects of damp, cold weather, but acts as a prophylactic, preventing the recurrence of colds, and thus aiding other remedies to complete the cure. Slight transient pain in or around the ear, of a shooting or twinging character, and aggravated by moving the jaw; membrana tympani often congested, dull and depressed: Eustachian tubes often closed by swelling of the mucous membrane and accumulation of mucus; extreme sensitiveness of the patient to a cold, damp atmosphere; every time he is exposed to it, or whenever the weather changes from warm to cold and damp, he takes cold. The skin is usually dry and inactive, oftentimes rough, and double work is thrown upon the mucous surfaces. In mercurius the skin is moist and clammy, and perspiration gives no relief, but rather makes him feel more uncomfortable.

Adonidin, the active principle of *adonis vernalis*, is an amorphous bitter substance soluble in water or alcohol. Its action is exerted principally upon the heart and in dropsy arising from trouble with this organ. Its effects are marked, increasing the amount of water discharged very materially. It diminishes the number of heart beats and increases their strength. It rapidly raises the vascular tension, the feeble and irregular action of the heart becoming strong and regular under its influence. It has no special action in nervous troubles of the heart. The indications for the use of adonidin seem to be the same as that of digitalis, but it is less apt to disorder the stomach and is less dangerous. The dose is from a third to half a gram.

Salicylate of Lithium.—In cases of acute articular rheumatism there sometimes comes a period after marked improvement when the joint remains painful, stiff, and swollen, and also in cases of progressive subacute articular rheumatism, which seems to defy control. This drug has been recommended in these cases as speedily curative in fifteen-grain doses four times a day.

Phytolaccin.—Dr. Desnos finds phytolaccin, the resinoid of phytolacca, in doses of $1\frac{1}{2}$ to 3 grams, to produce copious bilious stools, and he considers it an important addition to the therapeutics of constipation.

Sea-Sickness.—Dr. Neuhaus of Berlin, who has made a special study of sea-illness says, "The first indications are a general feeling of discomfort, loss of appetite, giddiness, headache, and a sluggish liver." He divides people who go to sea into three groups, or classes—those that are never sick, the proportion of whom does not exceed 3 per cent.; those that are never well, whom he likewise estimates at 3 per cent.; all those who, after a few days' illness, adapt themselves to their environment, and suffer no further inconvenience. Sea-sickness, in the main, is caused by the rapidly varying pressure of blood on the brain, due to the upward and downward motion of the ship. As the ship descends into the trough of a wave, the pressure increases; as she rises to its crest, the pressure diminishes, and nausea is the natural and ordinary consequence of a sudden rush of blood from the brain. While journeying round the world, Dr. Neuhaus ascertained, by personal observation and actual measurement, that when a ship is much tossed about, the livers of those of her passengers who have not got accustomed to the motion become affected in a remarkable manner. This is in part due to the loss of liquid in the system; but in bad cases, where the patient lies all day long in an inert condition, suffering from acute headache, the affection assumes one of the lighter forms of blood-poisoning, from the retention in the system of an element in the system of an element usually given off. Great relief may be obtained by lying on the side, with the head resting on the breast and the knees drawn up as near as possible to the chin. In this position the variation in the pressure of blood on the brain is reduced to a minimum, and the stomach and its nerves in a great measure are protected from the vibrations of the ship."

He says, also, "That if the illness lasts three or four days, chloral-hydrate may be given in doses of one gramme, and that alcohol is worse than useless."

Milk Testing.—Those who are called upon to test a large number of samples of milk in a rapid yet exhaustive manner, will find the following simple method invaluable. The apparatus used is a stoppered burette of 100 cc. capacity, with a glass tap at bottom. The solutions necessary are a solution of one part of caustic soda in 200 parts of rectified spirit, a solution of one part glacial acetic acid in two parts of distilled water, and Fehling's solution; also pure ether. Into the burette are poured, first 20 cc. of the alcoholic solution of soda, then 20 cc. of milk, then 25 cc. of pure ether. These are then well shaken together and allowed to stand at rest for six or eight minutes. Two layers will result. The lower one is then drawn off through the glass tap. In this we have the sugar of milk (lactose) and the casein. The ether layer remaining in the burette contains all the butter. The amount of butter is obtained by evaporating this in a tarred porcelain, glass, or platinum dish. In the other solution the casein is estimated by making up the 200 cc. with distilled water and precipitating by means of 2 cc. of the acetic acid solution. The liquid being then passed through a tarred filter, the separated casein is retained and may be dried and weighed. The filtrate contains the sugar of lead or lactose, which may be readily estimated by Fehling's solutions. The whole of these estimations

are easily performed in less than two hours. At the commencement of this process 20 cc. of the milk should have been acidulated with 1 cc. of the acetic solution, and set on a water bath to evaporate and finished in a hot-air bath. This being done in a platinum crucible the dry residue, after weighing for total solids, can be ignited, and the weight of ash determined. The complete analysis giving butter, casein, lactose, ash, and water by difference, is thus obtained within two hours, the results, with ordinary care and skill in manipulation, being most reliable.—*Monthly Magazine of Pharm.*

Iodoform in Diphtheria.—Dr. A. F. Richmond (*Lancet*) cured a very severe case of diphtheria by means of iodoform only. It was applied to the patches on the palate and the fauces with a camel-hair pencil moistened with mucilage three times a day. The child also inhaled vapor of iodoform whenever he suffered from dyspnoea, and was invariably relieved by it. The vapor was produced at the lowest possible temperature, so as not to change its chemical and curative properties.

Cure of Fistulæ by Injections of Oil of Turpentine.—Fistulæ of various varieties have been treated with good results by Dr. S. Cecchini by the injection of oil of turpentine. First, as regards anal fistula, he details seven cases in four individuals in which the injection was repeated several times at intervals of three days. Syringes with blunt nozzles are recommended; then the closing of the opening of the fistula with the finger after the injection has been made, so as to insure thorough contact. The pain produced is slight. In cases of fistula in connection with carious bone, four cases are reported in which cure was completely produced in from two to three months.—*Therapeutic Gazette.*

Terebene.—Terebene may be prepared by mixing 20 parts oil of turpentine with 1 part of strong sulphuric acid, allowing to stand 24 hours, decanting from sediment and distilling. The process is repeated until the product is without action on polarized light, when it is washed with solution of sodium carbonate, dried in a desiccator and rectified. The odor is agreeable and suggestive of thyme.

Mercuric Chloride for Granular Conjunctivitis.—Dr. Dujardin recommends as a remedy for granulated eye-lids a solution of mercuric chloride prepared as follows: Dissolve 1 gram of corrosive sublimate in a mixture of 10 grams of alcohol and 240 grams of distilled water. More concentrated solutions are painful, and have no special advantage. In solutions of 1 to 10,000 the remedy is no longer caustic but merely antiseptic and parasiticide. In the solution recommended by Dr. Dujardin, the remedy is said to be active, astringent and painful, but effective.

Cocaine Benzoate.—Dr. Alfredo Bignon claims superiority of benzoate of cocaine over the other salts of the alkaloid. He says the insensibility to pain produced by the application of a 5 per cent. solution of cocaine benzoate will last during four consecutive hours, the anæsthesia not being preceded by the sensation of pain noticed in employing the hydrochloride. Cocaine benzoate may be prepared extemporaneously by neutralizing 3 parts of cocaine with about 1 part of crystallized benzoic acid.

THE BROMIDES.

(Continued from Page 61.)

"THE obstinate vomiting of pregnancy is sometimes cured by full doses, one dram to a dram and a half, given by the rectum. The worst cases, of course, do not respond to this form of treatment, but require full doses of cocaine, by hypodermic injection, as recommended by Prof. J. K. Bauduy. The dangers of the formation of the cocaine habit are to be guarded against by not permitting the patient to know what drug is being used.

"Summer complaint of children, when the vomiting and diarrhoea are due to morbid irritability of the gastro-enteric mucous membrane, and not to the presence of micro-organisms, is often relieved by full doses of the bromides. It may be necessary to first secure tolerance of these drugs by giving a few minute doses of calomel, which not only clears out all irritating debris of food and septic organisms, but exerts a sedative effect upon the stomach, thus permitting the retention of food and the bromides. Children bear larger doses of these drugs, proportionately to their age, than adults. Combined with a carminative, like anise water, they form the best 'soothing syrup' for infants that has ever been devised. The dose must be large to be effective. Disregard of this fact has caused disappointment. The irritation of teething is said to be relieved by the local application of these preparations, mixed with honey, to the swollen gums. Given by the stomach, in effective doses, is a better mode of attaining this result. This may be, perhaps, because errors in diet are more commonly the cause of the troubles sought to be alleviated than the teeth, which are often blamed for events they are innocent of causing.

"Nocturnal incontinence of urine in children, depending upon a morbid irritability of the bladder or of the mucous membrane of the glands, is best relieved by full doses of these drugs. Circumcision or other surgical procedures may be necessary to effect a cure, but the hyperaesthesia is temporarily—sometimes permanently—lessened by the bromides.

"Chorea, especially that of pregnancy, is usually rapidly alleviated by the same salts. The intense nervousness, sleeplessness, and palpitations are generally relieved by them, even if the full cure requires the exhibition of arsenic and iron in addition.

"Tetanus of traumatic origin has been cured by the bromides in a few instances, but this disease calls for rapid alleviation and chloral, with or without curari by hypodermic injection, is more prompt in suppressing the active symptoms. There is evidence that arsenic, in the largest medicinal doses, with the bromides, has effected a cure in each of several desperate cases. Algernon S. Barnes is the author of this treatment. The arsenic was, no doubt, the principal agent in securing recovery, but the bromides secure sleep and relief from restlessness, hence they are invaluable adjuncts to the arsenical treatment of tetanus.

"But the grandest therapeutic triumphs of the bromides have been achieved in the treatment of epilepsy. It is in the convulsive and maniacal attacks of this disease that the most brilliant results have been obtained. Those of *petit mal* or vertigo are not relieved by them to the same degree. Occasionally, vertigo ceases under their administration, but they are not to be relied upon with anything like the same certainty as in the convulsive form.

"The first event in all epileptic manifestations is a spasmodic closure of the arterioles of those portions of the brain which have to do with consciousness and the intellectual operations. This is a vaso-motor disturbance; probably due to an irregular and excessive discharge of force developed in the supreme vaso-motor centre located in the medulla oblongata. The parts of the brain affected by the spasm of the arterioles seem to be those which are supplied chiefly by blood from branches of the internal carotid. There is sudden pallor of the face, especially of its upper portion, and dilation of the pupils. The effect of this spasm is to prevent the flow of blood through the carotid system of vessels. Consequent on this, there is an increased supply sent through the two vertebral arteries to the base of the brain, and, more particularly, to the medulla oblongata.

"The convulsive centre is in close relation, anatomically, with that exerting paramount control over the blood-vessels. This is immediately supplied with an enormous amount of blood and with it, of nutritive material. When it is thus irritated beyond a certain point, convulsions, general or partial, must inevitably result. The respiratory and cardiac centres are simultaneously irritated with that producing convulsions. Respirations are interfered with; the muscles performing the work of breathing are disordered in action, and the flow of blood toward the heart is interfered with until intense passive congestion of the face and brain succeeds the first state of pronounced anemia.

"There are several ways of reaching the morbid condition which starts the train of morbid events. We may remove the influence of the vaso-motor centre by the constant administration of nitro-glycerine, nitrite of amyl or other nitrites, which are transitory in their effects and require special care in their administration. We may, like Alexander, of Liverpool, ligate both vertebral arteries and thus prevent the sudden enormous flow of blood to the convulsive centre. But this is a surgical procedure not devoid of the dangers of producing paralysis and softening of the parts supplied with nourishment by means of these vessels. Another and most practicable method of breaking up this combination of pathological events, is to lessen the irritability of the vaso-motor centre in such a way that it cannot generate excessive amounts of energy and be unable to explode or discharge this force in an irregular and disorderly manner. This is what is accomplished by the bromides, better than by any other form of medicinal preparations known. Why they do not prevent the slightest forms of vasa spasms as well as the more severe ones, cannot be explained with our present knowledge.

"The bromides may be given in epilepsy singly or in combination, the latter way by preference. I believe it was Brown-Séquard who first pointed out this fact, many years since. Why a combination is more effective and more easily borne, is susceptible of a variety of explanations. The more plausible one, it seems to me, is this: The potassium salt has been given to most patients; as heretofore pointed out, the potash depresses the heart, and the salt itself has a debilitating effect upon the entire muscular system. When given for a considerable time, it induces its full toxic effects very surely. Now, when the sodium, lithium or ammonium salt is substituted for a part of the potassium preparation, just so much of the latter ceases to enter the system, and to produce its characteristic effect. Again, the ammonium bromide, although not depressing the heart, does bring out an eruption upon the skin. Although it renders the other more energetic, it does not pre-

vent bromism; therefore, the staggering gait, muscular weakness and eruptions were, for a long time, considered bad results inseparable from the production of the benefits expected from the use of the bromides.

"The sodium bromide, evidently weaker than that of potassium, when combined with the latter, necessitated the use of more of both than was required of the potassium salt alone. A combination with the very active preparations of calcium and lithium, with the others, keeps the dose small, lessens the cost, secures the best therapeutic effects, and diminishes the risks of severe bromism to the minimum.

"In the treatment of epilepsy, the first thing to be done is to secure a trustworthy preparation—one that is chemically pure; then insist upon the regular administration of the medicine. This is of the very highest importance. One or two days of neglect in introducing the drugs into the system will undo all the good secured by months of treatment. The bromides should be given in effective doses; an average of fifteen grains, three times a day is generally sufficient. They should be largely diluted with cold water; ice-water covers the saline, disagreeable taste better than anything else. If bitter tonics are required, they should be given at a separate time. Iron and quinine are both incompatible, physiologically and therapeutically, with the bromide treatment of epilepsy. If there is much acidity of the stomach, a few grains of an alkali: soda, potash, or ammonium carbonate should be given with them, to prevent the formation of irritating bromates. For the same reason, they should be given some time before a meal.

"Administered in this way, there is usually very little difficulty in suppressing the attacks of convulsive epilepsy. In some cases, unfortunately too rare, the morbid habit is effectually broken up and a cure results.

"Convulsions from any cause, after that cause is removed, are best treated with large doses of these preparations."

NOTE.—Peacock's Bromides are becoming very popular with the profession, each fluid drachm of which represents fifteen grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium, and Lithium. A case of recovery from meningitis is reported, after everything else failed.

New Base for Ointments.—The attention of the profession is invited to a new base for ointments, called AGNINE,* containing cholesterolin fat produced from wool, is a pure fat that will replace all other bases used for ointments, differing from them in the fact that it is free from *water, wax, or any added substance whatever*. The grease of sheep's wool has long been the subject of attempted applications of an economic character, either by the production of soap or by the extraction of potash from the crude material obtained in cleansing wool for textile manufacture. Its true nature was first ascertained in 1868 by F. Hartmann, who showed that it contained a considerable amount of cholesterolin.

Prof. Leibreich has examined the question whether cholesterolin fats belong to the various tissues as such, or whether they are produced by glandular secretions, and he is of the opinion that in the case of birds, the liquid secreted by the glands does not so much serve to oil the feathers as to free them from too great a profusion of fat, or at least to spread the fat evenly over the surface. In birds that have no coccygeal gland, such as the parrot and the fantailed

pigeon, the feathers have a far less shining appearance; but on trial the feathers of the fantailed pigeon were found to contain a small amount of cholesterolin fat, and it was inferred that birds without any coccygeal gland must be able to secrete sufficient fat from the feathers, and, that in fact, it is formed simultaneously with horny tissue.

It is mainly from the pharmacological point of view that the investigations by various experimenters has been carried out, since they were of the opinion that the peculiar characters of the cholesterolin fats would render them available for the purpose of medical treatment by ointments, etc., in cases where there are well-founded objections to the use of any of the hydrocarbon fats, such as vaseline and the various kinds of paraffins. One peculiarity of cholesterolin fat, is the ease with which it can be rubbed into the skin, and this ready absorption may be connected with the circumstance that it originates from horny tissue. Another important point is, that cholesterolin fat (of which the Lanolin prepared from the grease of sheep's wool is a type), is perfectly neutral, and, as it is very difficult to saponify, even with an alcoholic solution of caustic alkali, it may be expected that it will not be so liable to become rancid as glycerin fats.

MISCELLANY.

—Kings County Homoeopathic Medical Society has elected Dr. John L. Moffat, President for the ensuing year, and Dr. H. D. Schenck, Secretary.

—Dr. Holmes, mindful of the comfort of his professional brothers, in his poem, "City and Country," advises them to take a vacation, not by stealing the regular physicians' practice at a watering place, but getting out of the reach of practice, and for the time being a gentlemen of leisure.

He says:

"Ye healers of men for a moment decline,
Your feats in the rhubarb and ipecac line
While you shut up your turnpike, your neighbors can go
The old roundabout road to the regions below."

Advice every way worthy of a poet and philosopher.

—University College Hospital, London, is so agnostic that it questions the consistency of employing as nurses, members of a sisterhood!

—Dr. Burney Leo calls attention to the Iodide of Potash in the treatment of aneurism, given in from twenty to forty grams at a dose. The drug lowers blood tension uniformly throughout the body, by dilating the arterioles, and at the same time diminishes the force of the heart's action.

—Dr. B. H. B. Sleight, 23 Chestnut St., Newark, Secretary of the New Jersey State Hom. Med. Society, requests secretaries of other societies to send him names of their delegates, and particulars as to meetings.

—*Lithiated Hydrangea* (Lambert) is reported by Dr. F. W. Stewart to have promptly cured two cases of complicated articular rheumatism with uric acid excess.

—Mr. Balzer makes differential diagnosis between chancre, chancroid, and herpes, as follows:—With soft chancre there are always *elastic fibres* beside the epithelial cells, and pus-corpuscles, found with chancre and herpes. The fibres are treated with potash and stained with eosine, when they are easily recognizable.

* Messrs. Theo. Metcalf & Co., of Boston, will send sample free on application, to any physician.

—*Glycerine* has been found useful in burning coryza with tumefaction and pain.

—*Ice* applied to the lower part of the spine, has been found most useful in obstinate vomiting.

—*M. Pasteur* and his interesting methods, form an attractive feature of the Paris Sanitary Exhibition.

—*Conium* in small doses is an excellent nerve stimulant to the aged, and should not be overlooked in wasting diseases of this class.

—*Dr. A. L. Loomis* states that there is great risk to one with even slight cardiac insufficiency, in passing from a lower to a higher altitude.

—*Dr. E. H. Gregory*, of St. Louis, has been elected President of the American Medical Association for the ensuing year, and the next meeting will be held in Chicago, in June, 1887.

—The acuteness of vision of the average dweller in town, is far inferior to that of the average forester, due doubtless to usage, rather than to any peculiarity of the visual apparatus.

—Philadelphia has lost 60,000 people from consumption in the last 26 years, the mortality among negroes being twice that of the general population, and foreigners also show an excessive death-rate.

—What next? Teeth have been made to grow upon the tibia, by boring into the bone and inserting the tooth, and now we hear that the replacement of a diseased eye by the healthy eye of an animal, has been successfully accomplished.

—At our request, Hall & Bailey, the well-known makers of Vaginal Capsules, have a capsule for rectal alimentation, which will carry beef or other peptones, in a convenient and useful manner, thereby adding to our armamentarium, a most important adjunct in a class of desperate cases.

—*Dr. Richard Hughes*, Brighton, Eng., writes us just as we have gone to press and too late to print his letter, that the homœopathsists will hold their International Convocation at Brussels, on August 3d, 4th, and 5th next, full particulars of which may be learned by addressing as above.

—The College of Physicians and Surgery of this city, graduated a class of 97 on May 13th. *Dr. Wm. G. Thompson* was awarded the Alumni prize on "The Application of Instantaneous Photography to the Study of Physiology and Therapeutics," and also the "Joseph Mather Smith" prize, for an essay on another subject.

—*Dr. A. de Varona* has removed to 35 Schermerhorn St., Brooklyn, where he will continue to make Operative Surgery his specialty. *Dr. H. I. Ostrom* has removed to 42 W. 48th St., New York, and will continue to devote himself especially to Surgery. *Dr. Geo. M. Ockford*, of Revere, Mass., has removed to Lexington, Ky., where he has formed a co-partnership with *Dr. J. F. Edgar*.

—It is stated that the salaries enjoyed by the medical professors at Edinburgh University and the amount of work done for the money, are summarized as follows: Total income of chairs in medical faculty, £26,628; total expenditure of chairs in medical faculty, £5,180; total

clear income of chairs in medical faculty, £21,230; average clear income: 1. Of five professors without practice, £2,220; 2. Of seven professors with practice, £1,450.

—*Pasteur* reports having treated 726 patients, of whom 688 were for dog-bite and 38 for wolf-bite. Of the first class all are doing well except the girl Pelletier, and over half of the number have passed the critical period. Of the second class—all Russians—three have succumbed, the others, so far, progressing favorably. An essential difference is pointed out between the nature of bites by wolves and dogs, the former being regarded in Russia as always absolutely fatal. It must be remembered that the wounds from the wolves were very severe, and that a long time had elapsed before treatment was applied.

—The treatment of dyspepsia, etc., in Lombardy, consists in what is called "application of the comb," as follows:

"The sufferer is laid upon a bed and firmly held by the assistants—ten of whom have sometimes been required in the case of a strong man—the comb is then prepared and applied. It must be a very old comb and a very dirty one—the dirtier the better—and it is wrapped in tow which has been well soaked in oil and alcohol. So prepared it is placed upon the bare stomach of the victim, is set alight, blazes for a moment, and is then covered by a bowl or soup-plate, (slightly raised on one side), under which it is allowed to smolder until the tow is reduced to ashes."

—*Dr. G. A. Hall*, Professor of Surgery in Hahnemann College, Chicago, says: "When a man sits down upon a one legged stool and says, 'I am a homœopathist, I don't want anything to do with pathology, I don't want anything but symptoms and my little pills,' that man has contracted himself into such a state of infinite littleness, that I don't want anything to do with him. I want to enter my protest against those croakers who fold their hands in holy horror and exclaim, 'Oh! He is not a pure Hahnemannian,' whenever one does anything different from what Hahnemann happened to do. He was a great man and probably knew a great deal more than I do, but I do not feel it obligatory upon me, as a disciple of homœopathy, to follow all of his caprices, right or wrong, any more than I feel it my duty to bring up children on manna because the Israelites subsisted on it. Some apparently think that all opportunity for progress ended with Hahnemann, and with these it evidently did!"

—The *Lancet* contains an account of *Jäger's* plan of wearing nothing but pure wool, day and night, as follows:

"The result has been complete immunity from colds and a very marked increase in my capacity for work. I have not put on a great-coat night or day, have slept with an open window in my bedroom, and have been able to enjoy the luxury of an open cab instead of a close brougham. Instead of alternating feeling of heat and cold, there has been a uniform and most agreeable glow of warmth. I have, without any alteration of diet or regimen, lost 7 pounds in weight, and (which will, I believe, tax the credulity of some), have witnessed the disappearance of a lipoma of the nape of the neck, which had existed for some years, and had suggested the necessity for an operation. These latter facts powerfully illustrate the truth of *Dr. Jäger's* contention, that the complete and continuous action of the skin drains the organism of water and superfluous fat. I would say further, that the feeling induced, of perfect health is not the least of the recommendations to adopt the system."